

Globalistics And Globalization Studies: Aspects & Dimensions Of Global Views

Grinin, Leonid (Ed.); Ilyin, Ilya (Ed.); Korotayev, Andrey (Ed.)

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LOMONOSOV MOSCOW STATE UNIVERSITY
Faculty of Global Studies
RUSSIAN ACADEMY OF SCIENCES
INSTITUTE OF ORIENTAL STUDIES
The Eurasian Center for Big History and System Forecasting
VOLGOGRAD CENTER FOR SOCIAL RESEARCH

GLOBALISTICS AND GLOBALIZATION STUDIES

ASPECTS & DIMENSIONS OF GLOBAL VIEWS

Edited by
Leonid E. Grinin,
Ilya V. Ilyin,
and Andrey V. Korotayev



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Nowadays globalization processes have become all-embracing. But at the same time, despite the ever-increasing flow of publications on globalization, our understanding and knowledge of it still leaves much to be desired. Especially it concerns the global processes in general, of which globalization is a part. We also need to systematize our ideas about globalization and Global Studies to somehow fit the realities. In particular, this concerns the education process, because the current state of education will determine the way people will perceive reality in the forthcoming decades. This yearbook aims at contributing to the solution of these important tasks. It is the third in the series of yearbooks titled *Globalistics and Globalization Studies*. This year it has the following subtitle: *Aspects & Dimensions of Global Views*. Its authors consider globalization and Global Studies in different dimensions and aspects: philosophical, methodological, and pedagogical, in terms of various processes, problems and perspectives. Of course, to some extent this means that this yearbook presents rather diverse materials. But globalization itself is very diverse. And its comprehension may proceed in the framework of different theoretical approaches and points of view.

In the present yearbook one can find perceptions of globalization and Global Studies by a number of scholars from different countries of the world and learn rather peculiar visions of globalization by the Russian scientists and educators. The yearbook will be interesting to a wide range of researchers, teachers, students and all those who pay attention to global issues.

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Introduction.

Global Studies in Different Dimensions

A Google search of the word ‘globalization’ produces 11 million hits. This means that the processes of globalization have become universal. But at the same time, despite the ever-increasing flow of publications on globalization, our understanding and knowledge of it still leaves much to be desired. Especially it concerns the global processes in general, of which globalization is a part. The development of an adequate system of scientific views on global processes and their possible consequences remains a very important task. In short, against the background of increasing globalization we confront an acute lack of knowledge in this area.

We also need to systematize our ideas about globalization and Global Studies to somehow fit the realities. In particular, this concerns the education process because the current state of the education will determine the way people will perceive reality in the forthcoming decades. It is well known that many of the stereotypes laid in youth work throughout the lifetime.

This yearbook is the third in the series with a common title *Globalistics and Globalization Studies*. However, why Globalistics, not Global Studies? As we explained earlier, the notion of *Globalistics* first appeared in Russia, this is a translation of the Russian term *globalistika*; however, we believe it might be useful within the English Global Studies thesaurus. We are sure that the introduction of this term is justifiable, because it expresses the vision of systemic and epistemological unity of global processes, the presence of some relatively autonomous field with its own research subject. Morphologically this term is identical with such well-established designations of academic disciplines as Economics, Linguistics, Physics, and so on (for more details see Grinin, Ilyin, and Korotayev 2012, 2013).

This yearbook has the following subtitle: *Aspects & Dimensions of Global Views*. This means that we continue to consider globalization and Global Studies in different dimensions and aspects: philosophical, methodological, and pedagogical, in terms of various processes, problems and perspectives. In this respect the third issue of our yearbook continues the tradition outlined by its first and second issues (Grinin, Ilyin, and Korotayev 2012, 2013).

To some extent, of course, this means that this yearbook presents rather diverse materials. But globalization itself is diverse either. And its comprehension may proceed in the framework of different theoretical approaches and points of view.

Some articles presented in this anthology have already been published in various academic periodicals and almanacs (though some of them are published here for the first time).

The volume is subdivided into four parts.

Part 1 (*Philosophy of Globalization and Methodology of Global Studies*) comprises articles analyzing such extremely important dimensions as philosophical and methodo-

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logical ones. The articles in this section also address the problems of global research on the theory of the state and international relations and some other topical issues.

Part 2 (*Global and Regional Relations and Processes*) comprises articles that consider various interrelations between global and regional processes. Note that at present the study of interaction of global, regional and local processes is one of the most important areas of Global Studies.

Part 3 (*Global Trends and Perspectives*) contains articles that address some of the most important processes and problems of the present-day world, such as inequality, global aging, energy resources, geopolitics, and provide forecasts for the next decade, particularly in relation to the economies of developing countries, especially such as China and India.

Part 4 (*Teaching Global Studies*) is devoted to pedagogical issues. As we promised in the previous issue, we continue publishing some materials devoted to the teaching of Global Studies. As we wrote earlier, we regard the realm of teaching as a special dimension of Global Studies. The publication of various Global Studies curricula and courses for university students who learn to see the world in its entirety and variety is immensely important as the contents of such courses may determine how the world will be comprehended by those people who may decide its fate in a decade or two. The publication of various materials that reflect global pedagogical experience of teaching of Global Studies is also very important against the background of scarcity of such publications.

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References

- Grinin, L. E., Ilyin, I. V., and Korotayev, A. V. 2012.** Introduction. Globalization, Globalistics and Global Studies. In Grinin L. E., Ilyin I. V., and Korotayev A. V. (eds.), *Globalistics and Globalization Studies* (pp. 5–8). Volgograd: Uchitel.
- Grinin, L. E., Ilyin, I. V., and Korotayev, A. V. 2013.** Introduction. Global Studies from Theories to Teaching. In Grinin L. E., Ilyin I. V., and Korotayev A. V. (eds.), *Globalistics and Globalization Studies: Theories, Research & Teaching* (pp. 5–7). Volgograd: Uchitel.

Part I. PHILOSOPHY OF GLOBALIZATION AND METHODOLOGY OF GLOBAL STUDIES

Global Knowledge Revolution

Ilya V. Ilyin and Arkadi D. Ursul

Today all spheres of human activity undergo global revolutionary transformations. We can speak not only about the era of globalization but also about something like a global intellectual revolution. Two interconnected processes take place, one of which is globalization of knowledge, while the other represents global knowledge establishment. The authors want to determine the place of the exploration of global processes in modern science, to build a common vision and to estimate the prospects for Global Studies. One can speak about possible formation of global knowledge that may become a basis for the whole globalized science and education of the twenty-first century and may be used in global practical activities aimed at survival of civilization and preservation of biosphere and geosphere.

Keywords: globalization, Globalistics, Global Studies, global knowledge, global education, global intellectual revolution, global processes, global evolutionism, interdisciplinary science.

There is a growing understanding in academic literature nowadays that we live in the era of globalization and global intellectual revolution. The term 'global' even appears in everyday life, expressing a new view on the surrounding world which is already perceived as global. So it is important to study the way science reflects the global situation that has emerged and become the focus of our life. What are the typical processes of scientific cognition that should be involved in the current and upcoming global changes? In fact, since the last century, science has got interested in global phenomena of various kinds, but new academic disciplines and research areas focused on global matters emerged mainly in the second half of the twentieth century.

Emergence and development of Globalistics and other fields of Global Studies turned out to be a natural academic response to global challenges of the twentieth and the early twenty-first century. Realizing the important role of globalization and other universal, planetary phenomena and understanding prospects for further progress of global activities became an important sphere of academic inquiry and a new stage of modern science development. The Global Studies discipline already becomes the leading academic and educational process and serves as one of the bases for modern scientific worldview. A clearly marked and intensive process of globalization of science is taking place; all spheres of human activities undergo a certain global revolutionary transformation.

Therefore, a very important objective of Global Studies is to define its own position and role not only within modern but, most important, within future science. For this purpose it is necessary to reveal the evolutionary megatrends gaining global dimension and

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prospects. Another goal, at least of the same importance (if not more), consists in defining the role of global processes in society and nature, and in the processes of their evolution and co-evolution. A number of publications make an impression that, for example, globalization suddenly emerged and came to existence as if it had not been just a part, though an important one, of social and socionatural interactions and development processes. This brings about the ideas of one global process generating another global phenomenon, while their social and natural environment appears to be passive as regards this global genesis that seems 'autonomous'.

The perception and research of global phenomena is also important for further creation of high humanitarian and social technologies for education, international activities, global politics and global economy to form a global technological pattern of information society striving for sustainable growth. Since at present, no forms and models of global education are elaborated and effective enough to be taken as an example to follow it is particularly important to use the results of Global Studies in education. Therefore, the necessity arises to identify more clearly the place of global processes in science, to form a common view on the world educational process, to estimate Global Studies prospects and work out a common conception of global education.

So the further development of increasing global focus of science has not only scientific and research aspects, but educational and methodological ones as well. The scientific and research aspects consist in a more profound perception, elaboration and prospective forecast of the most effective ways of development of Global Studies, and, in particular, of Globalistics as a new fundamental area of interdisciplinary studies that influences the process of globalization of science in general. Educational aspects are related to scientific and research ones and are focused on the implementation in teaching process of new knowledge obtained through the scientific research. This is expressed both in the creation of special training courses and in the formation of global capacity in traditional courses connecting subject matters and methods of their research with the emergent global knowledge.

1. Genesis of Global Worldview

It is often suggested that global vision of the world and idea of humankind (Granin 2008: 7) emerged in their early and primitive forms in the Axial Age. One can hardly agree with this statement, since the concept of the global as covering the whole world was practically proved in our life and universe almost two thousand years later. Still one should take into consideration that 'the scientific truth of the idea on the spherical form of the Earth' was a well established fact 'in the early sixteenth century and almost 400 years later it finally captured and entered the humankind's conscience' (Vernadsky 1981: 107).

At the same time both the recognition and the achievement of this truth needed centuries-long work. Many centuries before CE, the idea of spherical form of the Earth emerged for the first time among the Pythagoreans. In those first concepts the idea was not connected with any geographic or astronomic data. It emerged and was proved by pure geometrical reasoning, by the ideas of harmony and mathematic aesthetics that were so typical of all doctrines of the Pythagoreans who foreran all major fundamentals of our scientific worldview: a sphere is the most perfect geometric figure and the Earth that holds such an important place in human worldview should have such form.

By the time of Plato, that is by the early fourth century BCE, the idea of the Earth's spherical form had finally eliminated the previous Greek concepts of a disk-like, flat, cyl-

inder, and endless conic form of the globe; it was underpinned by the data provided by the travelers and was the result of the cultural development. In the late fourth century BC, after a thorough examination of all contradicting statements this idea was supported by Aristotle and together with his ideas, spreading in the ancient world in the first century BCE, his doctrine about the spherical form of the Earth became an ordinary and common knowledge among educated people and penetrated classical literature. Many of the reasons that were expressed and emphasized at that time later were repeated in scientific debates in the Early Modern Period. These views became an impetus for the geographical discoveries and underpinned the ideas of searching for new unknown countries in the following centuries (Vernadsky 1981: 107–108). By the way, as Vladimir Vernadsky also noted, Magellan ‘undertook his round-the-world voyage relying on the idea of spherical form of the Earth, of which the Catholic Church was aware and yet blessed this voyage’ (*Ibid.*: 106).

In Russia the global thinking and worldview date back to Mikhail V. Lomonosov (see Abylgaziev *et al.* 2011). One should emphasize that Lomonosov's scientific efforts were also the focus of Vernadsky's research after 1900 (his several works were devoted to Lomonosov) and as a professor of Moscow University, Vernadsky published ‘On Significance of Lomonosov's Work in Mineralogy and Geology’ (Vernadsky 1900). Vernadsky noted that Lomonosov was ahead of his time with his correct estimation of the whole range of phenomena incomprehensible by his generation; he was in advance of his century and seems to be our contemporary in terms of objectives and goals of his scientific research. Vernadsky highly estimated Lomonosov's work ‘On Terrestrial Strata’ (Lomonosov 1949) and considered it a brilliant essay in geological science which provided the earliest foundations of geology that did not exist as a science at that time. Lomonosov also was the first scholar to view the Earth as an integral whole formed under the impact of interconnected internal and external factors.

Vernadsky positively estimated Lomonosov's suppositions on the mechanisms of earthquakes, on the ore lodes formation, their shift towards the Earth's crust breaks, on the origins of soils and fossil fuels, formation of amber and a number of other minerals and ores (Yanshina 1998) and even planned to write a work on Lomonosov's physical and chemical research; unfortunately, we can find only two pages with introduction under the title ‘On M. V. Lomonosov's Biography’ (Vernadsky 1988: 332–333). In 1927, Vernadsky established a special Lomonosov Commission affiliated with the Presidium of the Academy of Sciences. Later, in 1950–1967, thanks to the activities of the Commission, the Academy of Sciences published Lomonosov's complete works in ten volumes that included also all materials collected by Vernadsky's commission (Yanshina 1998: 444–451).

Undoubtedly, some Lomonosov's ideas about the interconnection of processes and phenomena taking place on the Earth influenced Vernadsky's works, in particular, the formation of his concepts on biosphere as a global system where the living matter plays the major role. One should also point that soon after his first works on Lomonosov, Vernadsky delivered a course of lectures in Moscow University in which he particularly addressed the matters of geographical discoveries and evidence of the spherical form of the Earth and a number of other matters that many scholars consider to relate to the origin of globalization process. Later these lectures were published in a book on the history of science mentioned above (Vernadsky 1981).

Vernadsky considered Lomonosov to be a great scientist, which were a few in the thousand years of human history. In the article ‘In Memory of M. V. Lomonosov’, Ver-

vernadsky wrote: 'A number of Lomonosov's ideas are clearer, more relevant and comprehensible in the beginning of the twentieth century than they used to be in the middle of the last century' (Vernadsky 1911: 262; 1989: 52). The same can be said about the significance of Vernadsky's academic heritage: his ideas are clearer, more relevant and comprehensible in the beginning of the twenty-first century than in the last century. The scholar's ideas about global phenomena that were almost unnoticed earlier, are only starting to open out and will be realized to a full in the course of further globalization of science and expansion of global processes. It is no coincidence that Vernadsky is referred to as 'a Lomonosov of the twentieth century', but it becomes obvious that his creative contributions are even more relevant for the present century. Today Vernadsky is considered a great thinker of the global era that also can probably turn into the noosphere era.

Many thinkers were at the origins of global worldview and created its fundamentals (some of them are mentioned in Alexander Chumakov's monograph [Chumakov 2013]). However, it was only Vernadsky who initiated the formation of a global consciousness and thinking as a new way and direction of environmental exploration with its own peculiarities. The scholar himself in the fragment 'On the Scientific Worldview' stressed that 'the discovery of America, the circumnavigation of Africa and discovery of Australia were of great significance for the scientific worldview' (Vernadsky 1991: 195) and like other round-the-world voyages of the great navigators of the eighteenth century strongly influenced our scientific worldview (*Ibid.*: 196). However, the scholar's global (planetary) perception of the world was formed not only due to the globalization processes he explored, but also in the course of his other researches.

In his works Vernadsky paid great attention to the formation of scientific worldview that, according to Mikulinsky, the editor of the book *Selected Works on the History of Science*, he understood as 'an aggregate of fundamental laws and facts discovered by science' (in Vernadsky 1981: 304); like, for example, in his 'Essays on the History of Modern Scientific Knowledge' (*Ibid.*: 32–185). His essays and notes on the issues of formation of scientific worldview give the impression that he considered it not only from the evolutionary perspective, but also showed that most important scientific discoveries significantly transformed the worldview, as it was with geographic discoveries. At the same time such worldview transformations concern the global trend of scientific understanding of the world as well.

The question is: when did the global trend in science emerge? The formation of one of the main areas of Global Studies, Globalistics in Russia, is usually dated back to the late 1960s – early 1970s (see Ilyin and Ursul 2013 for more details).

However, it might be reasonable to shift the origin of Globalistics to the first half of the last century. In our opinion, it is reasonable to shift the emergence of the global trend in science, notwithstanding its specific name, to several decades earlier and set it at the first half of the last century. In that very time, in particular in the 1930s, Vernadsky, at that time the Head of Mineralogy Department and professor of Moscow University, started to study a number of global processes (*e.g.*, the one we now consider globalization, though at that time this process was not yet denoted by the term 'globalization'). We argue that it was Vernadsky who pioneered the global worldview and thinking and also founded Global Studies and that many of his ideas focused on the planetary area.

The scholar started studying many processes of global character as early as in 1902–1903, which one can deduce, in particular, from his 'Essays on the history of the modern scientific world view' (1903; see in Vernadsky 1981) and a course of lectures delivered on

the topic in Moscow University. However, the scholar had no time to publish these lectures as a separate book, but later he included the first three of twelve lectures in the mentioned book (and he planned to write in total over 20 lectures) (Vernadsky 1981: 301–303). Thus, we can suppose that the scholar started working on the global issues in the early twentieth century, although, his research in this area at that time was little known.

Vernadsky believed that ‘In the twentieth century for the first time in the history of the Earth, the human being learned and covered the whole biosphere, completed the geographic map of the Earth and colonized its whole surface. The mankind became a single totality in the life of the Earth’ (Vernadsky 1991: 240). In his book *Academic Thought as a Planetary Phenomenon* (written in 1938) the scholar provides numerous facts and arguments similar to the ones of the contemporary scholars, indicating the humankind's endeavor to unity and integrity. In fact, in the book Vernadsky studied the globalization process and to some extent foresaw its outcomes.

Vernadsky introduced his ‘global’ ideas, in particularly, in his *Selected Works on the History of Science* (a number of its articles and fragments were written in the beginning of the last century) as well as in *Academic Thought as Planetary Phenomenon*. According to A. L. Yanshin and F. T. Yanshina, the authors of the preface to the later edition of the book, *Academic Thought* is the culmination of Vernadsky's creative work ‘on the destiny of scientific cognition, on relations between science and philosophy and on the future of the humankind’ (in Vernadsky 1991: 9).

A decade later, after World War II, the German philosopher Karl Jaspers (Jaspers 1991: 141, 158, 205) independently from Vernadsky came to almost the same conclusions on the global unity of the humankind.

We believe that it was Vernadsky who laid the ground for Global Studies both in Russia and in the world science in general and, thus, he can be rightfully considered the founder of the global trend in science, notwithstanding the point that he did not use the terms that were introduced later (Globalistics, Global Studies, *etc.*). We should emphasize that we speak about the global trend in science that includes the whole range of already existing disciplinary, interdisciplinary and transdisciplinary studies of global processes and systems. But it would be precipitate to argue that the scholar laid the foundation only for Globalistics or another area of global science. It is rather reasonable to speak about the priority of his academic interests in a broader ‘global format’.

And still in the world academic literature there is a strong adherence to terms, particularly, to the term ‘globalization’. From this ‘terminological position’ the authorship of the term is attributed to Roland Robertson who coined it in 1983.¹ In the title of one of his articles he uses the term ‘globality’. Later he also elaborated and explained the notion of ‘globalization’ which he formulated as an integral conception and developed in a special research in 1992 (Robertson 1983, 1992).

In this sense we can hardly believe that the global trend in science is connected mainly with the Club of Rome activity (Chumakov 2012: 55). Meanwhile, many Russian scholars suppose that terms ‘Globalistics’ and ‘Global Studies’ came into common use due to the global dangers, especially after the first reports of the Club of Rome. The latter undoubtedly played an important role in the formation of Global Studies, they turned the consciousness of a significant number of scholars and society to the global issues, but even in Europe this was not the first ‘global’ research. In the 1950s, this role of a certain ‘transna-

¹ Here one should point that one of the authors of this work used the term ‘globalization’ in a different context earlier than Robertson (see, *e.g.*, Ursul 1981: 204).

tional actor' after Vernadsky and Jaspers was played by already mentioned globalists whose activity, including the academic one, is still little known (Ursul 1998).

Globalism is an ideology and movement which aims at a shift from the present variety of peoples' activity to the unified, globally governed, integral world. Globalism as an ideology (unlike its Euro-Atlantic version) represents a sum of ideas meant for peaceful settlement of global issues, for establishment of institutions and adoption of norms common for all people on the planet. .

At present Global Studies are turning into a high-priority trend in Social Studies that seeks broader interdisciplinary and transdisciplinary connections and extensions. The global trend in science facilitates the creation of new general scientific and universal planetary principals and forms of academic and global activity and makes a great contribution to formation of the modern scientific picture of the world and thus promoting the global governance formation.

2. The Subject Field of Globalistics: Expansion or Contraction?

In the Russian academic literature Globalistics has been most often interpreted (and this notion was included in the first international encyclopedia on Globalistics) as an interdisciplinary integrative area of academic inquiry aimed at identifying the essence of globalization and global issues, reasons for their emergence, laws and tendencies of their development and reinforcement of positive and elimination of negative consequences with the purpose to ensure human survival and biosphere preservation (Mazour and Chumakov 2003: 199; Chumakov 2008; see Ilyin and Ursul 2013 for more details).

Below we will suggest an alternative and, to our mind, a more substantiate and broad point of view which involves the interaction between society and nature.

One should point that process of spontaneous globalization did not start several centuries ago from the geographical discoveries as is considered within Eurocentric approach. As Vernadsky shows, even the geographical discoveries started not with Columbus' and Magellan's voyages but with the Norsemen's voyages (Vernadsky 1981: 121–129). However, 'the spherical form of the Earth could be proved only when a man got the opportunity to travel around the Earth and put the whole picture of the globe on a map. This was done slowly and gradually through centuries-long work... The solution of the issue of the form of the Earth was connected with the first circumnavigation' (*Ibid.*: 115).

If we look deeper in the ancient history of the humankind, the processes similar to the global issues may be discovered back in the Paleolithic Age and early Neolithic Age. We can argue that global issues in a somewhat different form also emerged earlier, when there was no globalization in the contemporary sense (see Ilyin and Ursul 2013 for more details).

For example, Neolithic Revolution that started in various separated regions of the planet about twelve thousand years ago constituted a global evolutionary and historical process that facilitated survival of the mankind in that period (see Ilyin and Ursul 2013 for more details).

Such examples of social and socionatural processes prove that processes of this kind became global from the perspective of quality and content criterion but not in terms of territory and geography. However, it is reasonable to define the stages of globalization and other global processes formation by criteria of globality: the geographical factor within this approach does not initiate a global process (*e.g.*, globalization), but completes it.

Therefore, from the perspective of the content criterion of globality, one should shift the origin of globalization back to the ancient times.

Globalistics and Global Studies may be viewed not only as academic research sphere, but also as global practical activity rapidly developing at present (in particular, following Vernadsky's ideas as a geological activity) and aimed at the above-mentioned reinforcement of positive and mitigation of negative consequences of these processes for the humans and biosphere (see Ilyin and Ursul 2013 for more details).

In general, under the influence of Globalistics many scientific areas have already gained their global perspective entering the academic field of Global Studies and broadening it. The typical example is Geopolitics that is not included in Globalistics (though is tightly connected to it), but still has already become global (Abylgaziev, Ilyin, and Kefely 2010) (and there even may be its space continuation). Many branches of scientific knowledge will follow this route getting under the influence of the 'global attractor' of knowledge accumulation. Very soon we will face traditional branches of science getting the 'global' adjective added to their names.

The question arises: why does some academic disciplines entering interdisciplinary interaction with global factors and challenges to science start to 'merge' with Globalistics, while the others just put the global prefix before already existing disciplines? We do not see any serious reason under this nomination phenomenon and believe that it primarily depends on a researcher to give this or that name. Besides, this process most often goes by inertia increasing the number of supporters who agree with the initial name. In any case, the authors of the present paper have already given such names to new branches of Globalistics as Evolutionary Globalistics, Paleoglobalistics, Futuroglobalistics, Nooglobalistics, Space Globalistics and others; thus, other scholars have not argued against this. Still other names may be given as well, if academic community for some strong reason will not like the already given names. Together with further development of Globalistics the process of globalization of scientific knowledge has started which becomes open to an increasing number of branches of knowledge (this process will be dwelled upon in the end of this article). It seems that a number of such branches will not give its fields of Global Studies to the subject area of Globalistics like it has already happened to Global Economy (the name of 'Economic Globalistics' is not used for this very reason). It is rather probable that even 'Legal Globalistics' that has already received its name will still change it into 'Global Legal Studies' or will carry on Global Studies in this direction (Ursul 2012: 8). Together with Political Globalistics the term 'global policy' is also used, especially in foreign literature (Anheier and Juergensmeyr 2012).

Thus, two tightly connected but still different processes proceed: globalization of knowledge (within the framework of broadly understood Global Studies) and the establishment of global knowledge basically due to development of Globalistics proper (Ursul 2011). During the last two decades, Globalistics has switched to the research of globalization process giving significantly less attention to the study of global issues. If earlier the subject area of Globalistics included study of global issues (Dunnov 1991–1992), now the majority of scholars focus their efforts on study of globalization. As for other global phenomena within Globalistics subject area, they remain without due attention; anyway, it seems that global issues and globalization constitute the main subject of research in the sphere of Globalistics.

At the same time when Globalistics was associated with global issues study, globalization also existed and developed although in a different form, 'unnoticed' by many people. To some extent the global process that we perceive as globalization today, was reflected in academic literature as well (including Vernadsky's works), although this process was not denoted as 'globalization'. This refers not only to Vernadsky: other scholars, for example, Fernand Braudel and Immanuel Wallerstein, have studied the same process from 'their own perspective'.

If Globalistics is reduced to the study of globalization alone, there will probably emerge some more global processes that will attract attention of the majority of scholars and then we will have to define the notion of Globalistics again. Or, as mentioned above, we will have to include all other processes of global character in the subject area of Global Studies.

Now, in course of a discussion on globalization, a significant part of scholars concentrate on the social aspect, believing that globalization constitutes a megatrend to the unification of the mankind and to the global integrity of civilization (Granin 2008: 7). However, the upcoming threat of anthropo-ecological catastrophe reveals a necessity to solve a whole range of social and socionatural issues and form co-evolutionary relations between society and nature. So the future integrity of the mankind by all means should be combined with environmental security on the planetary scale. Globalization, from this point of view, is considered as a global process of forming the humankind integrity and simultaneous establishment of co-evolutionary relations with nature, which may be fulfilled via global shift to sustainable development of the noosphereic trend.

3. On the Place and Status of Global Studies in Science

It seems we can define global processes as the processes taking place on our planet and showing a certain 'global integrity' or tending to it. In this sense, global processes are not just processes taking place on the Earth, but universal planetary-scale ones, which cover the whole planet. However, it is important to pay attention to the existing etymological 'dichotomy' and linguistic ambiguity of the term 'global'. The term 'global' etymologically derives from two languages but not one: Latin (*globus* – sphere) and French (*global* – universal, taken in general). And in modern science the term 'global' is used in these two 'extensional' senses: 1) global as planetary, related to the globe; and 2) global as comprehensive, universal, general, and in this sense it outstretches to the sum of things or to the whole Universe. The global processes may be interpreted within these two, approached respectively: 1) global processes as those taking place on the globe in general; 2) global processes as those embracing the whole sum of things, at least the part of it, that is included in the observable universe.

It is also worth noting that one of the early 'model concept' of the Universe as a certain 'celestial globe' in the form of celestial spheres depiction with stars and other cosmic objects mapped on them derives from the same Latin meaning. By the way, the already discovered three main forms of matter existence (dark energy, dark matter and baryonic matter) may also be represented in the form of interpenetrating and interconnected fields (spheres).

The discovery of the spherical form of Earth was essential for the expansion of anthropogenic activity and for Global Studies. As Vernadsky noted: 'The first large main basis for the modern scientific worldview is the discovery of the Earth's form and size' (Vernadsky 1981: 104). Thus, '[d]ecision on the form of the Earth was connected with the first round-

the-world journey. Incidentally, America was discovered and in addition, this extraordinarily expanded the horizons available to an educated person' (Vernadsky 1981: 115).

However, let us move from etymology to the meaning of the terms that have already become conventional in modern science. In the contemporary global knowledge the term 'global' is used in the sense of 'embracing' a certain space and having a systemic integrity 'determined' by this or that space (the globe, the Universe). This meaning, which we denote as 'spatial globality', is often implied when we analyze globalization processes and a number of other global processes.

However, there is another meaning of the term 'global' which states that a given process (object) has some universal content-related characteristic, property or parameter that defines absolutely all existing processes and objects. For example, all objects of baryonic matter have gravity or a three-dimensional space. Or all people inhabiting the planet, even if they are not united in a certain global and integral system, in their development have some general social regularities. One can say that regularities typical of all people without exception and their communities (societies) are also global characteristics in the sense that they are inherent in the whole social movement and development.

Comparing these two meanings of the term 'global' (spatial and universal content-related) we can suppose that the latter meaning of the term turns out to be more profound and all-embracing. If any social processes have not gained their global integrity yet, they by their nature still possess certain universal integral content-related properties, which in this case turn out to be attributive universal human characteristics. It is clear that the attributive content-related qualitative criterion of globality proves to be 'stronger' and more significant than the 'spatial and quantitative' geographical one. Ontologically, 'qualitative attributive globality' is related to the nature and essential features of an object or process, to its inherent nature and qualitative content. In this sense globality, as an attribute of a certain tangible process or item, is its internal existential globality, while a 'quantitative' criterion appears as spatial extension of this content-related qualitative criterion. Globality of a certain process in the spatial sense is not persistent and this is well proved by the research of globalization phenomenon.

Thus, the important role of the term 'global' ('globality') also adds certain peculiar features to the global trend in science and groups almost all its cognitive means and forms. This specific notion influences the perception of the place and status of global processes research.

Globalistics and, moreover, Global Studies turn out to be interdisciplinary fields, embracing a significant number of academic disciplines and scientific research areas. And at the same time, there is an obvious tendency for the establishment of many notions of Globalistics and Global Studies as not simply interdisciplinary and transdisciplinary notions, but as general scientific categories. It is also important to find out (and this is widely discussed) what 'knowledge about the global' constitutes within the modern science: a science (in the meaning of a discipline) or something different, for example, a scientific trend, a scientific issue or a field of academic inquiry.

It is worth emphasizing that Vernadsky encountered the same issues when analyzing the synthesis of academic disciplines exemplified by Physical Chemistry (and Chemical Physics) and especially Biogeochemistry (which he actually founded) (Vernadsky 1981: 118–124).

On the one hand, following the 'logic of specialization' and differentiation in science, we can suppose that new disciplines (a science, a branch of science) emerged in the form of Globalistics and Global Studies. Scientists are already used to the fact that when new fields of knowledge emerge, it is reasonable to speak about a new science as a branch (component, unit) of science regarding the latter as an integral formation. In this case science is understood as a separate discipline or a branch of scientific cognition. This tradition complies with the already established disciplinary organization of science, where a discipline acts as the most significant structural unit of science forming an invariant, relatively sustainable structure of knowledge and a reference system, that allows putting in order the whole variety of science analysis units (Mirsky 1980; Ogurtsov 1988). Any academic discipline has its own subject areas, principals and methods of research, common organization institutions, educational forms and structures and also unified ways of formal and informal communication among scientists and between them and society. Within a broader and more integral system of 'science' a discipline usually acts as an established and necessary form of existence and systematization of knowledge, its development, distribution and application.

Meanwhile, discipline and science, as Kasavin notes, are not identical notions; though in modern Science Studies they are rarely distinguished (Kasavin 2010). This very paradigm of scientific thinking mostly deals with emerging fields of scientific knowledge. With this style of reasoning the new global trend of science in our country was named Globalistics while in foreign literature it is Global Studies (though in the USSR they used to speak about 'Western Globalistics').

The question whether to call this field of study Globalistics, Global Studies or some other way also depends on how it is positioned in the system of scientific knowledge. It is possible that it is a science meaning a discipline but only in a certain general part that really integrates and generalizes most fundamental knowledge about global phenomena and is not clearly defined yet. For example, Globalistics also includes such sub-disciplines as Political Globalistics, Information Globalistics, Space Globalistics, *etc.*, that go beyond the limits of a purely disciplinary vision of Globalistics, constituting a result of integrative interactions in scientific knowledge. Thus, Globalistics turns out to be a certain 'centaur-like' disciplinary and interdisciplinary cognitive phenomenon.

In this sense Global Studies are very much like Complexity Studies (usually denoted in Russia with the term 'Synergetics' proposed by Hermann Haken) that originated in Physics and at first developed within that disciplinary perspective. At the same time, according to Elena Knyazeva, Complexity Studies achieve certain limits of their disciplinary expansion (Knyazeva 2011: 256). Hermann Haken insist that Synergetics [Complexity Studies] is a discipline and, according to him, this name is given not only because it studies joint action of many elements of systems, but also because to find general principals governing self-organizing cooperation of many disciplines is necessary (Klimontovich n.d.). And these numerous disciplines add peculiar integrity to the synergetic approach exactly due to the effect of synergy and consistency.

Meanwhile, according to Stepin [n.d.], 'interdisciplinarity and transdisciplinarity do not contradict the status of Synergetics [Complexity Studies] as a special discipline'. Stepin stresses that '[synergetics] should outline its subject area, identify a system of methodological principles of research and include them in the established system of scientific knowledge' (Stepin n.d.).

Similar questions or issues on the place and status of newly emerging academic phenomena in science were already discussed when some other new fields of knowledge appeared and their rather marked integrative potential was manifested. For example, in the debates on the scientific status of Cybernetics: can it be considered as a separate science (discipline) or a scientific trend? (Ursul 1981: 204–216) There was a view that a scientific trend constitutes a system of academic disciplines and issues having a rather general research program that in case of Cybernetics consisted in cognition of general regularities of informational connection and management in biological and social spheres (*Ibid.*: 207). And most frequently one could hardly deny that Cybernetics is at the same time both a separate science (discipline) and interdisciplinary scientific trend.

Globalistics and Global Studies pass through the same stages of defining their position in science. Globalistics, if it is considered a newly emerging academic discipline, also goes beyond the established disciplinary boundaries. This is usually emphasized, but many scholars, in accordance with disciplinary thinking, continue considering it a branch of knowledge – a discipline (science), which looks logically contradictory. Thus, it would be strange to call this academic research phenomenon an ‘interdisciplinary discipline’. But, probably, it should be called (taking into account that science and discipline are still not identical notions) an ‘interdisciplinary science’? This term is often used in Wikipedia, where Biochemistry and Biophysics, for example, are described as such sciences.

The question whether the phrase ‘interdisciplinary science’ is adequate still remains disputable, and at the ‘competitive selection’ of the most suitable name for disciplines both for Globalistics and Global Studies some time should pass till this name becomes conventional. But for this purpose it is necessary to prove or at least suggest as an epistemological hypothesis that such a centaur-like ‘disciplinary and interdisciplinary’ academic phenomena may conceptually exist.

It is worth noting that Vernadsky expressed exactly the same idea when pointing to Biogeochemistry as ‘most tightly connected with a certain Earth shell, *biosphere* and its biological processes in their chemical atomic manifestation’ (Vernadsky 1991: 119). He observed synthesis of various academic disciplines in Biogeochemistry (and mostly those integrated in its name that does not accurately identifies its position in the system of knowledge), notwithstanding that ‘as it is clearly stated in its name, chemical representations and chemical phenomena play the leading role in comparison to geological and biological matter and phenomena’ (*Ibid.*). However, the scholar believes that Biogeochemistry is a separate (complex and young) academic discipline and he repeats this many times in his ingenious speculations on Biogeochemistry (*Ibid.*: 119–122).

While the term ‘interdisciplinary discipline’ looks logically and stylistically controversial and, thus, unsuccessful and hardly applicable, the term ‘interdisciplinary science’ may, to some extent, get ‘a right to citizenship’. But for this end we should introduce a new conceptual niche for the term ‘science’ itself that is mainly used in two meanings. The first meaning is science as a holistic systemic formation (regardless its gnoseological, activity-related or other interpretation), for example, as a component of culture and different from other constituents. Another meaning is a separate branch or academic knowledge about the above mentioned holistic phenomenon (or, as Vernadsky wrote, ‘a separate science’; *Ibid.*: 118). These two meanings were formed already within the framework of a disciplinary view on science, when integrative interdisciplinary processes did not yet have strong influences on the understanding of the term ‘science’. Within the context of the present arti-

cle, the third interpretation may also emerge: the 'centaur-like' meaning of the term 'science' used in the sense of 'interdisciplinary science'. Although, in our opinion the term 'interdisciplinary studies' (rather than 'interdisciplinary sciences') appears more appropriate and common.

Chumakov has expressed another point of view on the academic status of Globalistics. He believes that 'to avoid wrong analogies and methodological confusion, it is important to emphasize that Globalistics should not be interpreted as a separate or special academic discipline as many other that emerge resulting, as a rule, from scientific knowledge differentiation or at the interface of related disciplines. It results from the opposite integration processes typical of modern science and constitutes a area of research and cognition where various academic disciplines and philosophy (in close interaction and from the positions of each science subject and method) analyze all possible aspects of globalization and suggest certain solutions of global issues, viewing them as an integral system' Chumakov 2012: 4). This point of view (*i.e.*, the interdisciplinary approach) differs from Cheshkov's opinion of that Globalistics is an aggregate of different disciplines that just have a common 'label', or in other words, as a multitude of different sciences (multidisciplinary approach) (Cheshkov 2008). By the way, something similar is observed in the development of global education as well, where the debates take place on the status of Global Studies and the set of related educational disciplines.

When we speak about Globalistics and Global Studies, the multidisciplinary and polydisciplinarity of these fields of scientific cognition are rather obvious, for they include knowledge from various disciplines (and here the analogy is obvious with Biogeochemistry considered by Vernadsky). Polydisciplinarity implies the participation of a number of sciences in work on a certain issue, in this case global issues and processes, but at the same time sciences (disciplines) included in its subject area may only adjoin each other without serious interaction or synthesis. However, in fact many researchers of global phenomena argue not only about polydisciplinarity, but also about multidisciplinary of this research area, because they include intersection and interaction of a number of sciences (disciplines or branches of scientific knowledge). The interdisciplinary studies are usually understood as a way to arrange academic activity that suggests cooperation between representatives of different disciplines in the study of the same objects, and even a certain form of their integration. Globalistics and Global Studies undoubtedly constitute such a form or way of scientific research.

In our opinion, a typical peculiarity of such new researches is that in a certain sense, mainly in theoretical and methodological one, such researches have a certain disciplinary status, as they emerged not only within science integration, but differentiation as well. Even having emerged as a result of synthesis, such an academic form of knowledge still turns out to be in a certain sense separated from everything else, including the knowledge it derived from. Vernadsky noted this, arguing that 'the matter that outstretched beyond the boundaries of one science inevitably creates new areas of knowledge, new sciences growing in number and speed of their emergence typical of the academic thought of the twentieth century' (Vernadsky 1991: 118).

The differentiation of Globalistics and Global Studies is, from a certain perspective, a process of science specialization and differentiation; the distinct field of academic research differentiated from already existing knowledge, from academic disciplines that existed before its emergence. But the emerging special global knowledge also possesses

a certain interdisciplinary and integrative potential. Interdisciplinarity and transdisciplinarity of Globalistics does not contradict its disciplinary status, but, in order that it could have the status of a discipline, some necessary conditions should exist (and they do exist).

Before interdisciplinary and transdisciplinary potential and status appear in any newly emerged science (discipline) it is important that all basic notions and conceptual ideas of a new distinct academic discipline should turn broad enough and, due to this, start their expansion within academic knowledge. Meanwhile, the broader ideas and notions of a new area of academic inquiry are, the higher probability it has to gain interdisciplinary and transdisciplinary status. And if a new separated research area in its conceptual field remains within the framework of the original discipline, it will continue developing along the path of specialization within already existing sphere of researches. Therefore, only those new special studies are destined to have an interdisciplinary status that contain in their theoretical stock broader and more fundamental ideas and notions than the ones used before.

However, in this case the interdisciplinarity often transforms into transdisciplinarity (the term was introduced by Piaget in 1970), which is a very important form (way) for science to get its integrity that Karl Marx dreamed of. The transdisciplinarity suggests that a certain area of science goes beyond disciplinary boundaries. It proposes to use universal forms and methods of academic research beyond the framework of a particular discipline in the course of interdisciplinary interactions. At first the transdisciplinary notions, methods and theories emerged as a summary of certain disciplinary concepts and cognitive schemes, mainly in Physics, Chemistry, Biology and Mathematics. By the way, Mathematics represents a classical example of a discipline manifesting its transdisciplinary opportunities when entering the system of academic disciplines. Another example of transdisciplinarity is philosophy of science that penetrated many disciplines due to its methodological tools. The cognitive transdisciplinary forms and research tools at first develop within a discipline, then separate from its source and develop their own theoretical basis tested in other fields of knowledge.

There is a 'historical difference' of Globalistics from Global Studies and many other academic disciplines that has been mentioned above and in Chumakov's work: it 'consists in the fact that understanding of the global tendencies and principal solution of the issues generated by them requires not only theoretical research, but also corresponding effective practical activity. Thus, Globalistics objectively plays a worldview-related and integrative role in the sphere of science and practice, making many scholars, politicians and community leaders develop a new perception of the modern world and realize their involvement in the common destiny of the humankind. Globalization and issues it generates leave the humankind no other choice but to unity in order to overcome separation and controversies, possibly preserving uniqueness of cultures, centuries-old traditions and fundamental values of separate nations and peoples. But such a unity and coherence may be provided only by adequate understanding of processes and events taking place in the modern world, whose knowledge is worked out and articulated in Globalistics, where closest aims and long-term prospects are viewed in tight interaction' (Chumakov 2012: 8). However, this peculiarity of Globalistics (unlike Global Studies), as it has been mentioned, is also typical of a number of other interdisciplinary integrative trends, for example, space exploration, information science, *etc.* which also constitute a combination of academic research and certain practical experience.

4. Globalization of Science

Speaking about globalization of science (this term has been recently used rather often), there are abundant publications on academic mobility, brain drain from some countries to other, distribution of scientific knowledge around the world, publications and citation, use of new information technologies, international academic cooperation and formation of international academic organizations (often for solution of global issues) that facilitate globalization of science (Allakhverdyan, Semenov, and Yurkevich 2009). Vernadsky considered these issues when he dreamed of a powerful global academic organization (and even an 'academic think-tank' of the whole mankind) and grounded the necessity of various forms of international cooperation and scholars' organization as an important element of the noosphere establishment process (Vernadsky 1995: 124; 1977: 68). Further we are going to reveal the major trends of globalization of science due to Global Studies development.

Globalization of science manifests itself in various fields and areas. Particularly, it is expressed in the study of global characteristics and properties of research objects that were absent in 'pre-globalization period' or have not been realized yet. The process of filling science with global content, which we denote as a globalization of scientific knowledge, is mainly reflected in the emergence and development of Globalistics and Global Studies in the broadest sense creating the global world of knowledge. The further establishment of these studies was accompanied with the process of globalization of scientific knowledge, that covers a widening range of areas and branches of scientific knowledge adding the 'global' adjective to the names of certain academic disciplines and matters.

Development of Globalistics and Global Studies constitutes a significant part of the general process of globalization of science. The latter is to some extent similar to the influence of Mathematics, but it is not that significant yet. 'Global seedling' in this or that branch of science or problem may appear spontaneously, often even regardless of the results of global researches, and sometimes they may fail to trigger global trends and areas of research. Thus, science may gradually get 'saturated' with some, probably yet insignificant, scientific knowledge resulting in significant global transformations like establishment of a new global discipline or area of academic inquiry.

One can speak about the global world of knowledge in connection with pervasive processes of globalization and establishment of information society as well as of 'knowledge society' as an extension of the mentioned globalization process. It is quite clear that under globalization distribution of knowledge (including academic one) around the planet takes place as well as the formation of a peculiar type of knowledge that is defined as global knowledge. Rather often these processes are not distinguished (this also applies to processes of globalization of education and establishment of global education). However, it is reasonable to distinguish them, because, though they are interconnected, they are still differently focused processes of social activity and mainly academic activity.

In the course of establishment of information society and knowledge society there occur globalization of cognitive activity and this gives rise to different forms of transforming and integrating knowledge; thus, a certain global system of knowledge is formed that may be called the global world of knowledge. Naturally, this means that a general access to knowledge should form the basis of the shift to knowledge society (Towards Knowledge... 2005). As the German scholars Stehr and Ufer demonstrate, this process under market economy is very complicated; therefore, the establishment of the global knowledge

society turns out to be rather difficult (Conception... 2010: 178–185). In this process only a small part of knowledge has chances to obtain the global status, but a very large part of knowledge still faces difficulties that impede the movement to the global level. These forms (kinds) of knowledge never lose their local character, though there are situations when this character starts changing, while gaining universal global features (*Ibid.*: 191).

Further evolution of Global Studies will proceed both through ‘globalization’ of currently existing academic disciplines, trends and issues and through the development of Globalistics together with other areas of academic inquiry globalizing to some extent. Due to development of Global Studies and other global phenomena, science will gain its systemic and planetary integrity, and scientific knowledge will become available to scientists all around the planet.

It can also be stated that such rather obvious and important process of globalization of scientific knowledge is in progress. The prefix ‘global’ is somehow added to already existing sciences (disciplines): either to a form of a trend in Globalistics or before the name of a branch of science. A typical and already mentioned example is Economics that more often turns (and named) not just world but Global Economics (it is sometimes called Geoeconomics; see Kochetov 1999), and this notion summarizes new phenomena that have taken place in the world economy for the last decades and yet will take place under dominating influence of globalization and other global processes.

Another and even earlier example is Global Ecology as an independent complex scientific discipline studying biosphere in general, as it is important to forecast possible biospheric changes in future under the influence of human activity (Budyko 1977).

Global History (Karpov 2009; Shestova 2011a, 2011b; O'Brien 2008) and even Historical Globalistics (Ionov 2001) are still in embryonic state. Historical approach in Globalistics and global approach in History is the description of facts and events as consecutively changing in time, that is social dynamics in temporal dimension. Global History represents a trend of historical research of the global human development. The subject of Global History is the establishment of the social integrity of the world viewed in the context of global socionatural processes.²

The same refers to Global Geography (Lavrov and Gladkikh 1998), Global Cultural Studies, Global Sociology and a number of other academic disciplines with the prefix ‘global’ (Anheier and Juergensmeyr 2012). The thing is that ‘Legal Globalistics’ may still change its name into ‘Global Legal Studies’ or will continue global researches in this area (Ursul 2012a, 2012c, 2013). However, it is reasonable to suppose that the vast number of branches of science will not yield their areas of global researches to the subject area of Globalistics, as we see in the case of Global Economics (the name ‘Economic Globalistics’ is not used for this very reason).

They already speak about ‘Global Political Science’ and not only Political Globalistics that is included in the subject of Globalistics. Here everything depends on the dominating impact of either Globalistics or Political Science. Another example is Geopolitics, which has not been included in Globalistics (though tightly connected with it), but has already become global (Abylgaziev, Ilyin, and Kefely 2010). Many branches of scientific knowledge will follow this route falling under the influence of the ‘global attractor’ of increasing knowledge.

² URL: <http://www.almavest.ru/ru/favorite/2012/02/08/282/>.

Thanks to Globalistics, more and more academic trends gain global focus getting involved in the course of global researches, enriching and expanding them. Some of them may still enter Globalistics and promote its further expanding, others will remain beyond its subject area, although expanded, joining other global investigations. They are not positioned as parts of Globalistics, but as related sciences (disciplines) though already with a global dimension. The boundaries between these globalizing sciences and Globalistics remain vague, but all of them stay in the research area of Global Studies in the broad understanding. Further evolution of Global Studies will take place both due to currently existing academic disciplines and trends and development of Globalistics together with other areas of academic inquiry globalizing to some extent.

In the global dimension of science, as we have already mentioned, two interconnected but conceptually different processes take place, one of which is globalization of knowledge, while the other represents global knowledge establishment. Quite possibly, under globalization conditions distribution of knowledge (including scientific knowledge) around the planet goes on as well as formation of a specific type of knowledge, global knowledge. By this type of knowledge we understand knowledge received as a result of global processes and global evolution research that in prospect may become a basis for the whole globalized science and education of the twenty-first century and may be used in global practical activity aimed at survival of civilization and preservation of biosphere and geosphere (Ursul 2012b).

These globalization and global processes are hardly distinguished (the same is with the processes of globalization of education and global education establishment [Ursul 2011]). However, it is reasonable to differentiate them, because they are, though interconnected, still differently oriented processes of social activity and mainly academic activity. Global knowledge is generated in global trend of science (mainly in Globalistics and Global Studies), while globalization of science is accompanied with the current integrative globalization processes.

To some extent this process is manifested in digital networks and libraries (*Ibid.*). Naturally, it is meant mainly that general access to knowledge should present the basis for the shift to a knowledge society (*Ibid.*) that obviously will have global scale.

At present, Globalistics and Global Studies are still little involved in the broader systems of scientific knowledge. An attempt to change this situation is made in our monographs (Ilyin and Ursul 2009; Ilyin, Ursul, and Ursul 2012) where Globalistics is considered as the most important element of integrative general scientific knowledge forming the modern picture of the world based on the principles of universal or global evolutionism. This system of knowledge is formed in the course of interdisciplinary synthesis and integration processes in science representing forms and methods with the broadest subject area of academic research and use. The very use of global evolutionism as a methodology of academic inquiry (more frequently the analogy of bioevolution is used) led to differentiation of evolutionary approach within Global Studies.

References

- Abylgaziev, I. I., Ilyin, I. V., and Kefely, I. F. 2010. (Eds.). *Global Geopolitics*. Moscow: Moscow State University. *In Russian*.
- Abylgaziev, I. I., Gabdullin, R. R., Ilyin, I. V., Ivanov, A. V., and Yashkov, I. A. 2011. *Global Socionatural Processes and Systems*. Moscow. *In Russian*.

- Allakhverdyan, A. G., Semyonova, N. N., and Yurkevich, A. V. 2009. (Eds.). *Science under Conditions of Globalization*. Moscow: Logos. In Russian.
- Anheier, H. K., and Juergensmeyer, M. 2012. (Eds.). *Encyclopedia of Global Studies*. Thousand Oaks, CA: SAGE.
- Budyko, M. I. 1977. *Global Ecology*. Moscow: Mysl. In Russian.
- Cheshkov, M. A. 1998. Globalistics: The Subject, Problems and Perspectives. *Obshchestvennye Nauki i Sovremennost* 2: 129–139. In Russian.
- Cheshkov, A. M. 2005. *Globalistics as a Science. Essays on Theory and Categories*. Moscow. In Russian.
- Cheshkov, M. A. 2008. Globality as a Basic Notion of Globalistics. *Vek Globalizatsii* 2: 3–11. In Russian.
- Chumakov, A. N. 2008. On Subjects and Boundaries of Globalistics. *Vek Globalizatsii* 1: 7–16. In Russian.
- Chumakov, A. N. 2012. Global Studies in the System of Modern Scientific Knowledge. *Voprosy Filosofii* 7: 3–17. In Russian.
- Chumakov, A. N. 2013. *Globalization. The Outlines of the Integral World*. 2nd revised ed. Moscow: Prospekt. In Russian.
- Conception of ‘Knowledge Society’ in Modern Social Theory, 2010. Moscow: INION (Institute of Scientific Information on Social Sciences) RAN. In Russian.
- Dubnov, A. V. 1991–1992. *Globalistics*. Novosibirsk. In Russian.
- Faddeev, E. T. 1964. Some Philosophical Problems of Space Exploration. *Dialectic Materialism and Issues of Natural Sciences*. Moscow: Moscow State University. In Russian.
- Fedotov, A. P. 1999. *Introduction to Globalistics: Science Outlines about Modern World*. Moscow. In Russian.
- Granin, Y. D. 2008. ‘Globalization’ or ‘Westernization’? *Voprosy Filosofii* 2: 3–15. In Russian.
- Ilyin, I. V., and Ursul, A. D. 2009. *Evolutionary Globalistics (Concept of Evolution of Global Processes)*. Moscow: Moscow State University. In Russian.
- Ilyin, I. V., and Ursul, A. D. 2013. Global Studies in Modern Science. In Grinin, L. E., Ilyin, I. V., and Korotayev, A. V. (eds.), *Globalistics and Globalization Studies: Theories, Research, and Teaching* (pp. 146–155). Volgograd: Uchitel.
- Ilyin, I. V., Ursul, A. D., and Ursul, T. A. 2012. *Global Evolutionism: Ideas, Problems, Hypotheses*. Moscow: Moscow State University. In Russian.
- Ionov, I. N. 2001. Historical Globalistics: Subject and Method. *Obshchestvennye Nauki i Sovremennost* 4: 123–137. In Russian.
- Jaspers, K. 1991. *The Origin and Goal of History*. Moscow: Politizdat. In Russian.
- Karpov, S. P. 2009. Historical Science at the Modern Stage: The State and Prospects of Development. *Novaya i Noveishaya Istoriya* 5: 17–26. In Russian.
- Kasavin, I. T. 2010. Interdisciplinary Research: Towards the Concept and Typology. *Voprosy Filosofii* 4: 61–73. In Russian.
- Klimontovich, N. n.d. Complexity Studies: Slogan or Science. [e-book]. URL: <http://spkurdyumov.narod.ru/VvedenieSyner.htm>. In Russian.

- Knyazeva, E. N. 2011.** The Present and Future of Transdisciplinary Researches. In Krushanov, A. A., and Mamchur, E. A. (eds.), *The Future of Fundamental Science: Conceptual, Philosophical and Social Aspect of the Problem* (pp. 248–258). Moscow: URSS. *In Russian.*
- Kochetov, E. G. 1999.** *Geoeconomics (Exploration of the World Economic Space)*. Moscow: VEK. *In Russian.*
- Kostin, A. I. 2003.** Global Studies Formation. In Mazour, I. I., Chumakov, A. N. (Eds.), *Globalistics. Encyclopaedia*. Moscow: Raduga. *In Russian.*
- Kostin, A. I. 2005.** *Ecopolitics and Global Studies*. Moscow: Aspekt Press. *In Russian.*
- Lavrov, S. V., and Gladkikh, Y. N. 1998.** *Global Geography*. Moscow: Drofa. *In Russian.*
- Lomonosov, M. V. 1949.** *On Terrestrial Strata and Other Works on Geology*. Moscow – Leningrad: Gosgeolizdat. *In Russian.*
- Mazour, I. I., and Chumakov, A. N. 2003. (Eds.).** *Globalistics: Encyclopaedia*. Moscow: Raduga. *In Russian.*
- Mirsky, E. M. 1980.** *Interdisciplinary Researches and Disciplinary Arrangement of Science*. Moscow. *In Russian.*
- Nelson, R., and Winter, S. 2002.** *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.
- O'Brien, P. 2008.** *Global History. Making History. The Changing Face of the Profession in Britain*. [e-book] URL: www.history.ac.uk/makinghistory/resources/articles/global_history.html.
- Ogurtsov, A. P. 1988.** *Disciplinary Structure of Science*. Moscow: Nauka. *In Russian.*
- Robertson, R. 1983. (Ed.).** *Interpreting Globality. World Realities and International Studies*. Glenside, PN: Pennsylvania University Press.
- Robertson, R. 1992.** *Globalization: Social Theory and Global Culture*. London: Sage.
- Shestova, T. L. 2011a.** Global History as a Trend of Academic Researches. *Sotsialno-gumanitarnye znaniya* 6.
- Shestova, T. L. 2011b.** *Global Historism and Its Role in Development of Society Knowledge*. Moscow: MAKSS Press. *In Russian.*
- Stepin, V. S. n.d.** On Philosophical Grounds of Synergetics. [e-book]. URL: <http://spkur.dymov.narod.ru/Philos.htm#Ph408>. *In Russian.*
- UNESCO World Report. 2005.** *Towards Knowledge Societies*. Paris: UNESCO. *In Russian.*
- Ursul, A. D. 1964.** Some Philosophical Issues of Space Exploration. Moscow: Znaniye. *In Russian.*
- Ursul, A. D. 1981.** *Philosophy and Integrative-General Scientific Processes*. Moscow: Znaniye. *In Russian.*
- Ursul, A. D. 1998.** *Russia's Shift to Sustainable Development. Noosphere Strategy*. Moscow: Noosfera. *In Russian.*
- Ursul, A. D. 2008.** Globalization, Safety and Sustainable Development. *Vek Globalizatsii* 1: 17–22. *In Russian.*
- Ursul, A. D. 2011.** *Global Knowledge and Global Education*. Lecture. Krasnoyarsk: SFU. *In Russian.*
- Ursul, A. D. 2012a.** Global Dimension of Law. *NB: Voprosy prava i politiki* 5: 90–146. *In Russian.*

- Ursul, A. D. 2012b.** *Evolutionary Globalistics: Study Guide*. 2nd revised edition. Moscow: MAKSS Press. *In Russian*.
- Ursul, A. D. 2012c.** Globalization of Law and Global Law: Conceptual and Methodological Problems. *Pravo i politika* 8: 1284–1297. *In Russian*.
- Ursul, A. D. 2013.** The Law of Sustainable Development: Conceptual and Methodological Problems of Establishment. *NB: Voprosy prava i politiki* 6. *In Russian*.
- Vasilieva, V. M. 2012.** *Step by Step into the World of Global Science*. Moscow: MSU. *In Russian*.
- Vernadsky, V. I. 1900.** *On Significance of Lomonosov's Work in Mineralogy and Geology*. Moscow: Society of Amateurs of Natural Science, Anthropology and Ethnography Society. *In Russian*.
- Vernadsky, V. I. 1911.** In Memory of M. V. Lomonosov. *Zaprosy Zhizni* 5: 257–262.
- Vernadsky, V. I. 1977.** *Speculations of a Natural Scientist: in 2 vols*. Moscow. *In Russian*.
- Vernadsky, V. I. 1981.** *Selected Works on the History of Science*. Moscow: Nauka. *In Russian*.
- Vernadsky, V. I. 1988.** *Works on the History of Science in Russia*. Moscow: Nauka. *In Russian*.
- Vernadsky, V. I. 1989.** *Beginning and Eternity of Life*. Moscow: Nauka. *In Russian*.
- Vernadsky, V. I. 1991.** *Scientific Thought as a Planetary Phenomenon*. Moscow: Nongovernmental Ecological V. I. Vernadsky Foundation. *In Russian*.
- Vernadsky, V. I. 1995.** *Social Articles*. Moscow. *In Russian*.
- Yanshina, F. T. 1998.** Vernadsky on Lomonosov. *Vestnik RAN (Russian Academy of Sciences)* 68(5): 444–451. *In Russian*.

On the Philosophy of the Contemporary Globalization*

Endre Kiss

In this global reality the key to a constructive solution of political and social problems is not in the hands of politicians; whereas the crisis creates an impression ('an illusion') that new social and political problems could be solved in the framework of the old, pre-global structures. Therefore, at the societies' meso-level the global crisis also becomes a political one. At the national-etatic meso-level of globalization this phenomenon is also outdated and supports the action of yesterday concepts, even more, that also the political plausibility can come up, that such outdated and yesterday concepts of the national-etatic level could be successfully put forward now against the negative effects of globalization. The negative development is thus also doubled.

Keywords: globalization, history of globalization, periodization of globalization.

Globalization is defined as an unprecedented new *world state*, a special phase of the *world history* that is already perceptible but that started ultimately in its *mature* form in 1989 with the retreat of communism. Since then, some attempts have also been made to divide the history of globalization into some periods (Kiss 2012).

What is the Philosophical Question in the Periodization of Globalization?

The periodization, which is actually the history, of globalization, at the first glance, seems to be only a trivial but also an *empty* question. If we understand globalization as a world or a world system, it is obvious that this world will pass through diverse periods and thus will also have a *history*. If we, however, define globalization primarily as a world state, which is crucially related to the model of functional systems, then the question of historical phases is theoretically put quite attractively, *for the functionalism exists separately from the society and its actors* (Kiss 2010). Here, we think generally of the *differently procured temporality* of functional systems that are distinguished through the fact that their 'inner' temporality should work independently from the 'external, historical' temporality. Niklas Luhmann (1973) thematizes somewhat this problem through the fact that it has to be distinguished with regard to the *system-environment relationship*, and that time with regard to the *self-relationship of systems*. The specific and qualifying basis of globalization is in its functional character. The functional character of existence is indeed also historical, however, *this historicity differs much from the historical way of existence of the non-functional*

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dimension. Only the understanding that globalization is in its entirety a further not defined *complex* of functional and non-functional dimensions, helps us cope with this dilemma. So it is likely that this *interpenetrated coexistence* of functional and non-functional dimension as a whole, nevertheless, can have a history in a methodologically proper sense.

The emergence of globalization also brought an end to the division of an imperial world in two parts. Therefore, it is quite clear that the exact explanation of the imperial problematic seems to be absolutely sinking in the millennial harmony of new universal freedoms and global self-regulation. The independent factor of a *relative devaluation of the political subsystem* in the dynamic flow of the unfolding globalization (on these issues see also Kiss 2012) also contributes to this general state that one can characterize as spontaneous. The first far-reaching articulation of the imperial issues after 1989 belongs to Samuel S. Huntington (1996) who formulated the imperial issues also only within the new framework of 'civilizations'; however, it is quite difficult to follow him in the identification of the *new* aspect of civilization and the *traditional* one of politics. Taking this into account, we can conclude on the strength and vitality of the prevailing of both anti- and also post-imperial spirits at that time. Even the 'imperial' issues could be accentuated within civilizational framework of thinking. Huntington most clearly reformulated the imperial realities under the semi-political mask of new civilizational relations (Kiss 1997: 117–125).

The international politics has also continued, apparently unchanged, with its traditional imperial way to put questions in the era of globalization. It means that in a widely recognized era of globalization, the interpretation of the political system is not subjected to any fundamentally new approaches. The peculiar difference between the experiences of a new global world and an objective insight revealing that the political system is *not* globalizing on the basis of a quite *abstract* insight, might constitute a difficulty, certainly not easy to dispel in this learning process. It means that politics, as a system and as a subsystem, is persisting without any changes in the functional world of globalization. Politics just as a subsystem has not been globalizing for the simple reason that it is not and also could not be determined and governed functionally.

The increasing importance of the imperial discourse becomes an integral part of the history of globalization. Can this question, however, also be redirected? *Can we reinterpret the former history of globalization through the imperial discourse?* In our opinion, the history of globalization can be positively shaped by the imperial discourse.

The imperial issues hardly appear explicitly in the first period of globalization. Before this period the world was divided in two parts and this has drastically contributed to the validity of imperial reflections. Thus, it is not surprising that Francis Fukuyama in his theory of the end of the history (Fukuyama 1992) forecasts the coming of a *universal post-imperial democracy*. Exclusively in this context the basic approach of Samuel S. Huntington wanted to cool down the optimistic expectations towards a post-imperial new world order. Even Huntington himself does not want to call this new imperial start by its proper name. He formulates this new message not explicitly in terms of the subsystem of the politics, but in the half-political terms of the medium of 'civilization'. *In terms of 'civilization', the international politics will then recall the realism of Kissinger rehabilitating Metternich*. The *fundamentalism* is considered the only adequate *enemy* in this era of confidence.

The second phase of globalization, reproduced in terms of the imperial discourse, has again shaped the international politics. In this period of the post-communist democracy and of the neo-liberal politics, a possible international conflict can be legitimized only from moral viewpoint. The practice of imperial motives and causes was legitimate only if the society considers it as an answer to a qualified violation of human rights (Kiss 2000). The typical event of this second period was the Kuwait war against Saddam Hussein. This crude discourse guided wars and also made serious international conflicts again possible.

The third period of history of globalization, articulated in the context of imperial discourse, started on September 11, 2001. From that time, the contours of a new bipolarity become visible. In then still a unipolar global world, the so concrete and so vague *phenomenon of terrorism* took the position of a structural enemy violating the human rights. The Irak war of 2004 took place right in this new period. In 2011, Osama bin Laden's death brought a natural end of this period of globalization manifested in the imperial discourse. Osama's death manifests the threshold between two great historical periods of the new globalization. Here a combination of a new virtual and of a real bipolar world occurred.

The Huge Distance between the Big and the Small

The monetarism of the real global economy is an actual manifestation of a completely theoretical model. Here a perceptible proximity emerges between model and reality. This proximity raises a lot of new problems, in particular, those of an increasing smoothing of the effective difference between model and reality. In the case of a crisis, it will be more difficult to define whether this crisis is a more or less authentic realization of the model or it is a traditional cyclic destabilization of real economy.

The most determinant quality of the global economy is, however, only indirectly related to economics! It is the indebtedness of the state, by which globalization had relatively (or also absolutely?) devalued the need for states. However, an indebted state also has its own logic of functioning and this logic determines the economic life and social existence in general; while these two sides of a coin define the global economy also retroactively and reflexively.

The immediate past of the self-destructive society was determined by a generally good intention and by a confidence in the future, farther also from elements of a consensus in an optimistic humanism, which was partly composed of the communicative essence derived from the welfare society, and partly of common optimism towards the overall solutions of the human rights-oriented neoliberalism.

It becomes a very difficult interpretational task to separate the dynamic-structural moments of globalization from the cyclic and conjunctural changes in the explanations of a crisis.

The true definition of a modern or post-modern self-destructive society consists of a critical measure of the state debt. This measure does not allow the economy to pay the state debts even in the most optimal 'normal' conjunctural situation. *Achill does not catch up the turtle*. This basic criterion constitutes the self-destructive society taken in the proper meaning of the term.¹

¹ One should remember that there is a *state debt without globalization*, as well as there might also be *globalization without any national debt*. However, globalization has led to the fact that the action field of economy (above all, the one of the multinational groups) has hugely increased and put on its feet the specifically monetary concretization

An economic crisis, which breaks out at the world level, aggravates the global problem of the state, that is the permanent reproduction of national indebtedness. So, we can say that the worldwide economic crisis of 2007–2008 has only increased the internal tension of the global world with indebted states. As it often happens in real processes, *the crisis originates from the same economic and financial processes, which shaped the global world in real history*. The crisis is, therefore, not an independent phenomenon; it is rather a temporal end of a relatively unambiguous and linear development. The current economic crisis shows, how the economy, after a long galactical trip in the virtual existence, returned again on the earth.

After its worldwide victory of historical importance, the neoliberalism became a regulator and a driving force of the global development only at the ideological-political level. As a form of hegemony, it embodies the dialectical mutation of the earlier liberalism and earlier modernity. Obviously, as a hegemony, it cannot, however, also ignore the necessity and responsibility of emphasizing the new forms of emancipation.

In the age of globalization, the border between ‘normality’ and ‘crisis’ is much more transparent than in any earlier period. In pure theoretical terms, the global and worldwide interrelated economy is never in a state of crisis: what manifests here as a crisis actually appears a normal redistribution of resources. Of course, we should make *a distinction between the theoretical model and social reality*. We should, however, bear in mind that even the *language of the crisis* became different within globalization. For the world-political and world-economic reality, it is certainly of some interest that today the US banks are still aided by the government. However, one can also consider this as a theoretical criterion of the worldwide economic crisis, since in this context ‘crisis’ and ‘normality’ also stand in a different relation than it was in the pre-global world.

Certainly, we could still reverse this logic of crisis. Instead of a ‘crisis’, we could designate the current situation just as a ‘normality’, while we emphasize that it is probably the *‘normality of peculiar global relations’* and that the self-regulating power of markets can no longer suffice.

Hollywood and Greek Myths

The present-day common thinking may have the feeling that a global Hollywood production is running around it, when one wants to drag ‘interactively’. On the one hand, this current global everyday consciousness observes the dynamics, the tremendous success stories of globalization, what this conscience experiences also in its daily life. On the other hand, the same global everyday consciousness finds itself confronting a disintegrating, fragmenting political and social reality, which it can finally fail to escape. Thus, it can also be easy to experience this new reality as a new condition of life. The more substantial efforts the everyday consciousness makes to survive, the more it comes to realize that such efforts for the sake of simple survival no longer constitute only the others' worries, but also its own ones.

The *Homo globalicus* feels himself one day as a Superman of the civilization and a target group of numerous networks which compete with each other and which are all in dread for grace and recognition. Another day, the same *Homo globalicus* turns to be as a Pariah, whose numerous formal and individual liberties cannot change a single iota in his social downfall, if not social death. Between both these oscillates a society that confronts the problems of perception and possible interpretation of globalization.

of the deep structures of global economy, in which the money itself could also function as the most important wares.

Globalization in Mind

The phenomena of globalization can be investigated within several referential systems. How exactly we define them is of utmost importance because the exceptional exuberance of phenomena, as well as the exceptional complexity of global relations could easily make even the most thorough investigation arbitrary.

The everyday consciousness and the mentality show an astonishing continuity of characteristics within globalization. We argue that these strict attitudes of the everyday consciousness have hardly been modified during the two decades of globalization.

As far as the fundamental principles of the modern everyday consciousness are concerned with respect to understanding of reality, the basic orientations of the *individualism*, *anti-totalitarianism*, *consumerism* and *post-modernism* have hardly changed. It is all the more striking, because the unquestionable hegemony of consumerism can no longer be confirmed and legitimized by the reality in the period when neither the magnitude nor the qualitative differentiation, as well as the social dissemination of the consumption can hardly approach the real consumption society.

It is then no ironic gesture, if we describe the everyday consciousness operating within globalization as a consciousness representing a consumer's consciousness without real consuming. This is by no way a solitary example that the consciousness does not refer to the basic being, in particular, the consciousness of an object does not correspond to this real object. Similarly, the same non-correspondent relation can be also marked in the 'post-material' world of values applying to the reality. These post-material values kept on living also unchanged in the first two decades of globalization.

The same refers to the post-modern thinking.

Besides the phenomena of value relativism and virtual reality, the post-modern difference thinking dominates also over the present globalization, as well as the post-modern vision of the other and the otherness. The present system of post-modern values in the global everyday consciousness is of a comprehensive importance both from methodological and substantive point of view. With respect to methodological reasons it is important because the post-modern thinking is applied in quite new structures of thinking (difference-logic, deconstructivism), in structures, where already every single fact requires further fundamental explanations why these structures could gain a foot-hold in the domains of control of the everyday consciousness with their new logic and new reality processing. The everyday thinking must enable a man to eliminate the everyday problems. It is clear, that the essence of the new post-modern thinking and the necessity to enable the everyday consciousness to eliminate daily problems are not precisely related to each other.

Here a new fundamental question arises derived from the basic problematics, namely, how it was possible that these post-modern structures of thinking could endure in their difference logic and in their inability to admit and articulate the common issues of social reproduction, precisely at the time of globalization, since the post-modern value orientation can definitely disorient the everyday consciousness in recognizing the global world of life in its abstractions and deep fragmentation.

In addition to the long-term hegemony and validity of basic applications of the everyday consciousness, of the post-material values and/or of the new post-modern structures of thinking, the comprehensive 'soft' interpretation of the most important relations, the en-

thusiasm of happiness, the leisure propaganda or the new '*californism*' with its eternal sunshine, sex and body-building are considered as surprisingly strong and uninterrupted.

The 'soft' – 'hard' relation applies now as already the fourth dimension of the current global everyday consciousness (in addition to the principles of the everyday consciousness, of the post-material values and the specifically post-modern structures of thinking of different logic).

The predominance of the 'soft' or 'tender' interpretations of reality constitutes the reality and it is a constitution of the world of relative independence.²

If we try now to understand these orientations and types of thinking from a sociological point with respect to their own temporal circumstances (not within the circumstances of globalization), it seems clear that they can be interpreted, primarily, if not exclusively, as products of a slow and constantly repressed *dismantling of the industrial society*. Within this context, it is noticeable that the concerned soft modes of thinking only rarely thematize explicitly the real processes of this withdrawal. Anyway, it is clear in this respect why the fundamentally 'soft', that is 'tender' characteristics, dominate in them. The advent of the 'soft' trains of character as sociological genesis corresponds to the context that has just been marked as a real event by the withdrawal of the 'hard' social relations.

This basic, although not decisive, explanation is, however, essentially modified by the problem circle of the neo-Marxism. The neo-Marxism keeps the conviction of the relevance and survival of the industrial society (it means, that this thinking represented the unchanged 'hard' elements of the former industrial society). On the other hand, the neo-Marxism manifests itself, in comparison to the former Marxisms (mainly, of course, to the Stalinist and post-Stalinist Marxism), almost in every respect as definitely 'soft' approach.

Amongst the actual relationships within globalization, there are numerous representations of both hard and soft components. The almost exclusive dominance of the 'soft' dimension in the range of the new forms of thinking applies, therefore, as a disproportion.

The gathering of the soft varieties of interpretation and understanding of reality appeared only after the comprehensive hard processes of the *year 1945*, the *Reconstruction* (Wiederaufbau) and of the *Cold War*. This corresponded also to the necessity to legitimize both the political consolidation and the economic miracle (Wirtschaftswunder), as well as that of the consumption society and democratic system. All these elements of the new world order were effectively 'softer' than their predecessors.

Yet, accompanied with crises and conflicts, this trend was followed by a whole range of new phenomena and attitudes, such as the ever wider and deeper level of consumption, the design defining the external image of the society, the new subculture of the fashion, the always softer and more intimate (and more naked) world of social communication, the growing recognition of individuals and personal happiness, the modified relation towards the minorities of any kind, the democratic and consensually accentuated treatment of social conflicts, the conscious struggle of social mechanisms of exclusion, the growing recognition of women and the increasing number of social opportunities, and also the increasing superficiality of interpersonal relations in schools, the democratization of military forces and generally the comprehensive wave against authorities and authoritarianism.

² These forms of thinking do not appear directly in the immediate articulation of judgments; they are, however, not direct contents, but principles, methods and procedures, which help an effective elaboration of the reality. A 'soft' treatment of reality means then not exclusively 'soft' judgments, but the 'soft' methods of construction.

The softness and the growing 'soft' interpretation of the events gradually formed a composite field, a new medium of historical and social existence that slowly radiated from the sixties as a determining trend and also as a normative force. In this respect, the US war in Vietnam in the sixties and seventies is also a significant example that such a 'hard' reality might no longer be admitted and could not be treated in such a 'tender' social and political universe.

Certainly, in a stricter sense the circumstances and relations have not been 'hard' or 'soft', but this is a functional convention through which we perceive social relations and phenomena as 'hard' or 'soft'.

Through the lens of sociology of knowledge (Wissenssoziologie), the decisive aspects of social perception appear in a clear light. This shows that the type of perception is also the one of evaluation, and as such also the one of *categorization* and *qualification*. This means, that a society estimated in terms of 'hard' or 'soft' is not necessarily utilizing its sociological perspective, but is also disposing of previous preferences, in any case, however, of previous value estimations. Then it is also equivalent with a new form of sociology of knowledge, if, as it seems, the *actual existential fixation* (Seinsgebundenheit) remains still determining in some generality in the prevailing constitution of thinking. This however means also, that the previously analyzed ways of thinking (principles of everyday consciousness, post-material values, post-modern structures, and the 'soft' dimension) on their part are also disposing of new, partly untouched ideological potentials.

The Peculiar Approach of the Post-Modern Way of Thinking

Until the present, the forms of consciousness prevailing within globalization are not yet developed ideological forms. In their 'new' form they are, however, already dissociating from the classical definition of the '*existential fixation*' (Seinsgebundenheit) of thinking. As structures of thinking, they do not correspond to 'reality' and so they shape a *logical relation of a new difference*. The terms (notions) do not refer to reality. *In the logic the identity relation is ideology*. This generally new approach, with necessary simplifications, can be also formulated within the dual dichotomy of the 'hard' and the 'soft'.

While the *philosophical* post-modern thinking in difference (by Foucault: the logic of identity is a form of the discourse of the 'Institution' [Foucault 1999]) dissociated the thinking from the reality (from the reference to a provable objectivity), the post-modern *everyday thinking* is not following exactly the same path. While the philosophical post-modern thinking in the new order of difference logic is also able to exercise the '*hard*' mode of intellectual processing, the post-modern *everyday thinking* defends itself through its 'soft' character at least against the absurd consequences of the philosophical post-modern thinking. 'Soft' difference thinking can never become so absurd as a 'hard' one.

In terms of philosophical difference thinking, the soft processing of the current (global) reality leads to the *manipulation* ('hard' relations are 'softly' treated). The outlines of the symmetrical opposite worlds take shape and sometimes they also design the reverse contours of each other.³

The new type of the hard version of the difference logic in post-modernism presents the reality through its own way of perception, radically 'more evil' than it is, while the 'soft' difference thinking of the everyday consciousness allows showing the same reality much 'more harmonious' and 'more balanced'.

³ Such a reversal is simultaneously *real* (politically and sociologically) and *logical*.

Crisis within Globalization

As demonstrated above, globalization has its (inner) history, with all the methodological problems derived from this fact. The inner variations within different periods of globalization have not changed anyhow the fact that globalization exemplifies the rule of huge functional systems expanding onto the whole earth, that the value of individual freedom, or, in other words, of the agency element, has become decisively larger; that a constant struggle is led for the sources at the meso-level of globalization by different actors organizing the state and the society. That attempt has also hardly changed the situation when the international right is extended for the purpose of interventions of the neoliberal-human rights, as well as also that the philosophical distance between the abstract order of globalization and the elimination of concrete tasks of the social being is not diminished. Half a century ago, the critics of real socialism claimed that the real socialism was the world of *'the collective irresponsibility'* and argued over who may have been responsible if the huge apparatus of collective decisions is no longer accountable. Numerous new variants of the same collective irresponsibility are, however, also reproduced in the distribution of responsibilities and competences among global institutions of different levels.

In the basic definitions of globalization the range of phenomena, which we commonly call a *crisis* in the ordinary languages, is also developed organically. We have often pointed out that it is one of the most striking and most unprecedented characteristics of globalization that *'crisis' and 'normality' coexist in a new way*.

This new leading characteristic can resemble certain historical antecedents because the setting of a local crisis at a higher, global level can be exactly comprehended at this new, global level as a *part of a normal process*. Such a local crisis expanded to the global level can also be interpreted as an *expansion*, if not an *advantage* of globalization, because precisely due to its crisis nature it can implicitly favor the regrouping of resources in a more optimal way. The phenomenon of 'globalization' could succeed not only as a new but also as a new and 'positive' phenomenon, because it represents a field, where even serious 'crises' can lead to positive and universal consequences.

The new relations between 'normality' and 'crisis' were in fact already noticed before 2007–2008 in the basic relations of globalization. However, within such a constitutive context, the crisis of 2007–2008 starts a new era.

This crisis also produced new and decisive changes in the global actors' behavior. Before 2007–2008, the rules of interpretation and action proceeded from the fact that globalization as a 'system' works perfectly. To criticize this system and to act against its spirit might only appear an exceptional phenomenon.⁴

After the crisis, this attitude has fundamentally changed.

However, the crisis is by no means the only determinant that can play a crucial role in the configuration of the global future. The other phenomenon of equal importance in its global dimensions, is a transformation of the imperial structure of globalization. At the end of the first decade of globalization, a great transformation becomes quite evident. The first half of this decade was the period of the so-called 'unipolar' world followed by the formation of a new structure that embodies then several simultaneous structural formations with already several poles perceived in the global architecture.

⁴ This assertion contains obviously an exaggeration, which, however, demonstrates this particularly important trend of the global world of opinions and global everyday life.

The contemporary phase of globalization serves a starting point of any forecast.⁵

This phase is currently determined by three comprehensive elements: 1) the crisis of 2007–2008; 2) new definitions of a new ‘multipolar’ world; and finally, 3) changes and new interactions of the aforementioned two aspects (crisis and new multipolarity).

The system of the basic features of globalization is always based on an everyday struggle within the *mesosphere* of globalization. This struggle is disputed between the *basic functional-monetarist attributes of globalization* and of the global meso-level, that is of the *political sphere*.⁶ This struggle of the relative and structural indebtedness of the state (every state!) occurs in the form of a peculiar negative spiral, in the etatic, political, social and every other representative sphere of life in the society and thus *perfectly reverses the social existence!*

The society's fears and hopes are also articulated and realized in the meso-dimension. The specific basic attributes of the meso-level considered previously as relevant are also very clearly manifested in current globalization. We mention the *functional change of politics*, the *one-person group*, the *natural residuals*, the element of the *self-destruction* in the tissue of society, the paradoxical phenomenon of the *revolt of the rich people*, the *present-future continuity* and the (already mentioned new) provisions of the alternation between ‘*crisis*’ and ‘*normality*’.

The crisis has fundamentally changed the *direction* of actions and motivations. Before this crisis, the leading orientations of action were arranged to interpret the processes of globalization as an organic development, as a free game of free forces, when the individuals' diverse concrete objectives could be realized. After the crisis, the doubt, criticism, often even suspicion towards the foundations and legitimation of the same processes already appear as the leading orientation of action. While before the crisis these processes were considered ‘*natural*’, now as quite the reverse, almost nothing is considered as ‘*natural*’ or ‘*obvious*’. Whilst yesterday the ‘*action*’ was predominant, today it is the ‘*reaction*’ that prevails.

Within this new approach, the original paradoxes and ambivalences of globalization are obviously much more manifested. A sociological dimension is thus manifested. *How was it possible that the prevailing tendencies and methods of thinking of the seventies and eighties remained, practically unchanged, prevalent also in two decades of globalization?*

The present situation could also be exacerbated by the fact that now *all those paradoxes and contradictions of globalization penetrate the everyday consciousness*, which have not yet been understood by this everyday consciousness in these characteristics. While up to the beginning of the first decade we have precisely exaggerated the vision of ‘*global*’ relations as ‘*normal*’, actually the same everyday consciousness considers globalization, with the same element of exaggeration, as arbitrary, not measured, and sometimes even as hostile.

In this framework, it soon becomes clear that the greatest extremes of the phenomenology of globalization consist in that *distance* and in that *contradiction* that exist between

⁵ It goes without saying that a huge speed of global processes makes it difficult to define exactly the ‘current’ state of globalization, because it often happens that at the moment of its publication an exactly performed analysis of a current situation no longer corresponds fully to the actual environment. Nevertheless, this difficulty cannot prevent us from a thorough investigation of different phases of current globalization.

⁶ Ld. Jövőkutatás és globalizáció. Új szempontok a két terület áthatásainak kutatásában. In: Jövő. MTA IX. Osztály Jövőkutatási Bizottságának hivatalos lapja. 2006. 3. szám. www.jovo.jovokutatas.hu/3/kiss-jovokutglob.rtf glob and Kiss 2007.

the richness and the universality of globalization and the increasing social problems of many individuals, groups and societies. Before the crisis of 2007–2008, a part of the opinion-forming industry did almost everything to prevent the interpretation of the real processes as organic and spontaneous events. This intention and its successful admission are now shaken. The emergence of the decisive and reactive thinking has become a *fait accompli*.

Already before the crisis, that is to say in the previous historical period, it was clear that globalization produces a double effect on society. One of its most important impacts on the world is that globalization differentiates and also divides the individual as an *individual person* and the individual as a *member of a social formation*. Like any fundamental opposition of this kind, it is both rather abstract and rather concrete. A person as an individual can perceive globalization positively and at the same time as a member of some social formation can become the victim of globalization. The reverse situation is also possible.

The revolutionary transformation, if not jump of the *agency* (the *agent's freedom*) delivers that frame, within which the power of an individual can increase also in a historical proportion. The same frame, however, can also relatively depreciate the individuals affiliated in the social formations (church, trade union, political parties, family, *etc.*), because the larger formations, as actors, cannot provide the same level of self-realization to the same extent, as an individual as an actor can. Thus, these formations in comparison with the individuals' opportunities can become structural losers of globalization, as it has happened with the state.

According to the script of a Hollywood superproduction, the world society now expanding would be effectively a quite ironical story. While globalization was creating its huge possibilities and freedoms, a great part of the world society would generally perceive it as a restriction when just the pure survival even more clearly becomes the main challenge. The irony of this virtual film script manifests also in the fact that the unique constructive and constitutive side of globalization is profited and enjoyed by individual men or women, well organized in their social networks, while the destructive side of the same globalization process becomes the fate of the individuals organized in diverse social formations, and the destruction can lead to a total elimination of jobs or residential possibilities.

The redoubled anthropological consequence of globalization consists, therefore, in the fact that it favors and supports the individuals capable of competition better than the individuals organized in formations.

The temporal shift between global realities and their delayed notice leads to a new *asymmetry*. The societal standings or the ranking of a whole society are likely *not* to consider and treat in a balanced way the constructive and destructive sides of globalization. And it is all the more so, because the representatives of the *constructive* opinion on globalization are lucky 'individuals', while the 'real masses', arising from the decay of the previous great social formations, feel themselves marginalized. But they still revisit the world of the former great organizations.

This evolution leads to a development of political and social issues that remind of the problems of the pre-global period. A new *simulacrum* (Schein), both theoretically and practically determined, occurs. This appearance means that the social and political issues correspond to those of the pre-global period and represent a 'continuation' of the old realities. The 'appearance' (Schein) updates the phenomena of crisis and re-

minds of the crises of the former periods. In many people's lives this 'appearance' is, in fact, a 'reality', however, not convincing in its essence, because the problems seeming identical represent the phenomena not of an international industrial society but already of the post-industrial global world society.

This creates some philosophical problems. The status of reality itself is redoubling. The crisis that occurred at the meso-level reminds of the cyclical economic crises of the pre-global industrial society, while the same crisis is in fact already a consequence of globalization.

System Changes within the Structure of Globalization

To a certain extent it depends also on the actors, on their ability to adapt to the overall situation through their behavior. If populist or extremist concepts appear on the scene as a 'solution' of these new political and social problems, it also implies that these new actors do not want to perceive the whole situation as a 'global', but as a 'traditional-national state-centered' reality. Through a simple categorization of the situation they make politics and through their politics they define the situation. The fact that they revive the language and the concept of populism and extremism of the thirties with an astonishing fidelity only proves the idea stated at the beginning of this article that the currently prevailing flows of thought can become extremely distant from the present real historical situation. This actually arises the question whether the terms 'left' and 'right' could be still legitimately applied to the present global relations.

The political and social issues lead again to the systemic-theoretical dimensions of globalization. The fundamental functional characteristics systematically depreciated the basic dimensions of politics as a non-functional sphere. For historical reasons, the basic social issues have been admitted and articulated within the system of modern society through the politically based problematic. Through the depreciation of the political system, the depreciation of the social system also occurs. If there appear political thoughts that can invoke through their categorization a pre-global political situation, the importance of the political and social systems is again reinforced, which, however, cannot bring to the conclusion that globalization already disappears in this way and the pre-global reality becomes true.

In this also already structurally reduplicated global reality, *the key to the constructive solution of political and social problems is not in the hands of the politicians*, although the crisis creates the impression ('the appearance') that the new social and political problems could be solved within the framework of the old, pre-global structures. Therefore, the global crisis at the meso-level of societies becomes also political. At the national state-centered meso-level of globalization this phenomenon is also outdated. It contributes to the action of yesterday concepts; moreover, *even the political plausibility can successfully put forward those outdated and yesterday concepts of the national state-centered level against the negative effects of globalization*.

The search for new responses to the crisis gets out of control in societies and in mass communication. The whole activity of this search is, however, severely limited by two points. First is the intellectual limitation. Here, the comprehensive lack of utopia and utopia's hostility become rapidly visible, furthermore the already analyzed deep fixation of the everyday consciousness on the forms of thinking of the seventies and eighties, the belief in the former truth of the thesis of the 'end of the history' (today, we are already mis-

taken that no new theories are possible), this also includes the consequence of the year 1989, when the neo-liberalism marginalized, if not compromised, all other major structures of thought, while these different great directions could not properly react up actually to this degradation (the so-called 'Third Way' exemplifies this point by social democracy, with which we can thoroughly study, how the neo-liberalism moved the social democracy away from its own trend).

This search for new responses is also complicated by the fact that *different levels of action are, however, not all in the hands of those who want to react*. This also means that a strong intellectual background is already necessary.

At the current phase of globalization, only those economic and social solutions are important that now can be organically qualified in the fundamental system of relations within globalization. This means, above all, that they are not separated in systemic-theoretical terms from the determining structural and functional relations of globalization.

In our days, the structural loser,⁷ that is the political subsystem, is again reevaluated *in an indirect way* of social issues. Social and political problems should be solved, but this cannot occur in the directness (Unmittelbarkeit) of a pre-global view of political and social systems. We cannot also exclude that a sudden revaluation of political system leads, in the public consciousness, to the diminution, if not to repression of the importance of globalization. The sudden revaluation of the political system can bring back to life the political ghosts that we believed to be dead.

References

- Foucault, M. 1999 [1966].** *Die Ordnung der Dinge*. Frankfurt am Main: Suhrkamp.
- Fukuyama, F. 1992.** *The End of History and the Last Man*. New York – Toronto: The Free Press.
- Huntington, S. P. 1996.** *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster.
- Kiss, E. 1997.** The Civilisatory Components of the Post-Socialist System Change. In Gerlich, P., Glass, K., and Kiss E. (eds.), *From the Center towards Europe and Back* (pp. 117–125). Vienna – Poznan.
- Kiss, E. 2000.** Human Rights and Man in the Current of the Globalization. Szerk. In Woit, E., and Klopfer, J. (eds.), *Völkerrecht und Rechtsbewusstsein für eine Globale Friedensordnung* (pp. 55–64). Dresden.
- Kiss, E. 2007.** About Meso-Level Dimensions of Globalization. In Glavanovics, A. (ed.), *The Europe of Regions: Literature, Media, Culture* (pp. 131–137). Székesfehérvár: Kodolányi János University College.
- Kiss, E. 2010.** A Philosophy of Globalization. *Age of Globalization* 2: 53–65.
- Kiss, E. 2012.** Possible History of Globalization and Challenges of the 21st Century. *Vek globalizatsii* 1(9): 57–67. *In Russian*.
- Luhmann, N. 1973.** *Zweckbegriff und Systemrationalität*. Frankfurt am Main: Suhrkamp.

⁷ It must also be emphasized in this context that the structural and functional relations in globalization should not be confused, under any circumstances, with immediate real relations. A structural loser can, for example, appear in other contexts as a definite winner!

An Insight from Globalistics Perspective: What Must We Do Confronted with Globalization?*

Alexander N. Chumakov

The article is dedicated to the process of globalization initially seen as an objective historical process. The author reveals main problems and contradictions engendered by globalization, of which lack of governance in the contemporary world is the most dangerous. It is discussed how global governance is possible and who is responsible for it. The author analyzes lessons of the world financial crisis and concludes that dialogue is the most effective means to overcome the contradictions of the contemporary world.

Keywords: globalization, contemporary world, cultural-cum-civilizational systems, regulation, governance, global governance, world crisis, cooperation, dialogue.

General Remarks

The global financial crisis is not over. This crisis once again has clearly demonstrated that financial markets can become a source of serious socioeconomic tensions. The crisis has also shown that without an adequate system of control and coordination of activities of the bodies regulating the world economy, the financial markets transform from a creative force into a destructive one.

The documents of international organizations as well as many economists' investigations maintain that financial crises are inevitable for the market economy evolving in a cyclic manner.

It is important, first, not to commit subjective errors which can exacerbate or provoke crises. Second, we need to take well-timed and proper measures in order to mitigate the consequences of crises.

As for specific decisions made by certain countries or regions such as, for example, the European Union, they should be left to politicians and specialists in economics, management and so on. However, taken out of the world context and without taking into account globalization processes, such decisions would never be efficient.

An adequate understanding of the world situation in general and of globalization in particular becomes the task of utmost importance. Mere technological solutions are insufficient to solve it. We need a philosophical analysis of the contemporary situation and earlier trends of the world development. The concept of globalization acquires the primary importance here.

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Globalization as Reality

Today almost everyone seems to be interested in globalization, including scholars and politicians, artists, businessmen, journalists and some individuals. However, this does not mean that in this field one can find any general, though vague, concepts, consolidated opinions or, at least, a substantial understanding that alongside with new problems, dangers and negative consequences globalization also brings new opportunities and prospects. On the contrary, we doubt even the fact that global society itself is now emerging on the planet, although many things seem evident, such as a full closeness in geographic space, universal interdependence, common environmental and nuclear threats, planetary information system, and world transport communications, *etc.*

To assess the global world properly, one should understand that from the very beginning its processes, including globalization itself, are first and foremost objective. Of course, the global processes are somewhat influenced by subjective factors, but, nevertheless, in their progressive development they occur basically irrespective of the will and subjective aspirations of individuals, social groups, corporations, or even separate states. Globalization processes and global problems of modernity have emerged not spontaneously or by mistake, not due to somebody's good or wicked plan. They resulted from an objective and logical development of society and its new relations with the environment.

The contemporary world seems to have dramatically changed virtually within the last decades; but it is not so. True globalization started in the age of the great geographical discoveries. By the beginning of the twentieth century, globalization became fundamental after it had strengthened and expanded to new spheres of social life. Today globalization is total and multi-faceted as economic, political, cultural and information flows, links and relations have irreversibly transcended the boundaries of countries and nations, being no longer their domain and prerogative.

I can hardly agree with a widely-held view that globalization was born by the twentieth century. It would also be a mistake to equate globalization with modernization or mostly with economic integration. Unfortunately, this simplistic vision of a complex issue is common even among scholars, engendering numerous debates about 'waves', 'intensification', or 'stagnation' of globalization.

It is important to emphasize that up to the early twentieth century humankind had been developing mostly fragmentary and separately. Originally there were local, later regional, cultural-cum-civilizational systems, which had relatively insignificant influence on each other or did not even interact. Now the world cultural-cum-civilizational system is being formed. Its shape became clear by the beginning of the twentieth century. With the emergence and exacerbation of the global problems in the 1970s and the 1980s, the global significance of changes became evident also in the broad public consciousness. Humankind became a planetary phenomenon. It entered the age of universal interdependence of different countries and nations. In spite of the emergence of the foundations of universal culture they still preserve their national cultures, but at the same time some signs of civilizational unity are increasingly manifest.

It is impossible to dwell more on these ideas, so I would like to emphasize the main point. Now one can speak about the global society or the single world civilization being really formed. With increasing persistence, more and more countries and nations are required to follow universal norms, rules, bans and prescriptions. Having entered the era of

transformation from 'local' and 'regional' cultural-cum-civilizational systems to universal cultural-cum-civilizational system, we should act in an appropriate manner.

Perceptions of Globalization

In real life even an obvious necessity of changing human behavior quite often produces no desired results. In other words, people either completely ignore the changes around them, or react inadequately. This is absolutely true in the case of globalization as well.

Today globalization is as real as a sunrise. The contemporary world, beyond question, has radically changed under the influence of globalization and faces dangers, which have never existed before. Even mass consciousness, not to mention the academic community, understands it as an axiom.

It can be both good and bad. It is good because there is no need to prove that globalization is a topical issue. Thus, we have more opportunities to find constructive solutions and reasonable practical responses. It is bad because even sound experts in Global Studies start to see the contemporary situation through the lens of habit. Thus, they are able to see only one aspect of the situation, from the position of their long-held views. As a result, attention is focused, as a rule, on what is conventional and evident. All other secondary or nascent problems (dangers, obstacles to social development) remain without due consideration. For example, there is a common statement that the world community has never been so endangered in its history as today, in the twenty-first century. It is usually associated with the threat of nuclear war and environmental disaster, which is true, but the problem cannot be reduced to these issues. The point is not that we just have nuclear weapons, poorly controlled and threatening humankind with a real possibility of self-destruction. The increasing human pressure on the environment definitely worsens the tough ecological situation, but it is not the greatest danger.

What is more important now is that humans and their behavior in the global world is not an integral part of this world. In other words, in the last decades the whole complex of global problems has been enlarged by a new danger, still hardly comprehended – *a cardinal and rapid change of the architectonics of world interconnections and interrelations. At the same time, the world community demonstrates the inability to react adequately to such changes.*

We need a new approach to world problems and we should rethink the priorities of their solution. One should emphasize that by the end of the twentieth century globalization made the world community fully global and that relations, communications and information flows became crossborder. Humankind has become a holistic system with respect to all the main parameters of social life. Nation-states (now their number reaches 200) have ceased to be the only international actors. Numerous multinational corporations, international organizations (including criminal ones, connected with drug trafficking and international terrorism) have also become actors. And as before, this world with many interdependent and confronting actors is simply spontaneously self-regulated and does not have the governance that it needs.

The situation is exacerbated by the fact that humans are naturally biosocial beings. They still combine good and bad, kind and evil, love and hatred, peacefulness and aggression. Of course, culture, upbringing and education make people humane and tolerant. But we cannot change human nature and biological essence: aggressiveness, lust for domination, struggle for survival, violent solutions, *etc.*

As before, these things can be traced in the behavior of separate communities and in the nation-states' policy. Now the whole world community as a holistic system behaves selfishly towards the natural environment. The one who does not notice or pays no attention to it will lose firm soil under her/his feet, becomes deluded by abstractions and has no prospects for changes for the better.

It is also important that the number of earth inhabitants has exceeded seven billion people and continues to grow. At the same time, the planetary resources needed to support human lives are limited. They are also unevenly distributed (as well as the population) and some are scarce or extinguished. There is overt and covert struggle for the access to natural resources. Most likely, this conflict of interests is going to increase in the future and confrontation is going to become more severe.

The Main Issue of the Contemporary World

As a result, the global world, facing essentially new challenges and having no adequate system of governance, gets more and more into the situation of increasing contradictions and uncertainty. This is the main problem, the main contradiction of our epoch! We can also say that under the influence of globalization processes the world community, in fact, becomes more and more a single holistic system with respect to all parameters of social life. At the same time, there are no governance mechanisms adequate to this holism.

The most striking in this situation is not that this governance does not exist as such, but that it is not purposefully constructed. Moreover, even theoretical discussions about it are rather infrequent today, not being the focus of public attention as they deserve to be (although concerns about the situation in question grow).¹ Besides, *governance* in general and global governance in particular, unlike *regulation*, cannot emerge spontaneously. This issue is to be discussed below; here I would like to make some points about the reasons why this happens.

First, we deal with a principally new, unprecedented situation related to governing an extremely complicated and huge socio-natural system, which human beings have never encountered in their history. This situation is exacerbated by the fact that the humankind's experience and the proven practices to resolving complex problems are not valid any more. At the same time, no new approaches have been worked out yet.

Second, the world community, in spite of the increasing interdependence of different countries and peoples, still remains fragmented, divided into autonomous and self-organized structures, which function in accordance to their own laws targeting, first of all, their private profits and interests. These are nation-states, multinational corporations, and confessional systems, such as Christianity, Islam, Buddhism, *etc.*

And third, globalization itself and its numerous consequences remain a subject of serious discussions. Such discussions often conceal the main thing: globalization is, first of all, an objective historical process and not a project specially designed by someone, or someone's insidious plan and intention. We should emphasize this point because if in rethinking globalization processes and their circumstances we proceed from a subjective factor and pay attention mainly to those who benefit from it, and then we would start to search for perpetrators and discuss globalization scenarios. In this case we face our inability to distinguish be-

¹ An article by Alexander B. Weber 'Systemic World and the Problem of Global Governance' published in *Vek Globalisatsii* journal (Weber 2009) is one of the first publications attempting to formulate this problem and to seek approaches to its solution.

tween an objective, natural course of events of social development and subjective human activity. The former, of course, is the basis of social development but it is not sufficient to provide governing complex systems without adequate structures and mechanisms. Thinking globally, one cannot help recognizing the state of affairs: there are no structures and mechanisms of government adequate to the holistic global world. That is why, in my opinion, it is useless to look for perpetrators or those responsible for globalizations. Moreover, such approach engenders illusions and is dangerous because it complicates the matter and distracts from the search for real solutions for the urgent issues.

When considering globalization first of all as an objective historical process (which is my position), one should look for means of solving globalization-engendered problems (including governing social systems) in the sphere of structural changes of the world society. This approach is based on a proposition that complex systems, or, at least, biosystems (of which human beings are a part) in their development are regulated naturally, based on natural laws. Here one can talk about the self-regulation of complex systems.

Apart from that, social systems are also governed, because an active element plays an important role in their development. This active element is human beings who, due to their abilities, consciously influence various parameters of development. It is evident that the planetary-scale social system, which is being formed now, should not be just *self-regulated* but also *governed*. It is important to distinguish between *regulation* and *government*, because they are not the same.

Regulation (from Latin 'regulo' – to set up, to fix, to order) should be understood as a spontaneous process or intentional activity aimed at providing functioning of this or that system within a framework of parameters, set up naturally or intentionally.

Via regulation (as well as self-regulation) one can solve the task of the most optimal functioning of a system, creating the most favorable conditions for interaction of different components of this system. Regulation is aimed at consolidated actions of various parts of a whole and can be done consciously (when human beings play a regulative role), or spontaneously (when we talk about self-regulating systems). Population numbers constantly changing within some limits is an example of natural (spontaneous) regulation of a system. It depends on the presence of food supplies, or on obtaining its external parameters based on its genetic code and specific environmental conditions.

The biosphere as a whole is also a self-regulating system, whose balanced development is supported by the law of the struggle for survival. Regulation becomes purposeful when it is done with participation of a subjective factor, introducing some order to this or that system. This is how a traffic-controller acts at a crossroads or a specialist regulating, for example, the functioning of an engine, the level of water in a basin or tuning an antenna. Regulation can be conducted automatically, for example, on roads via traffic lights.

Governance, unlike regulation, never occurs naturally and spontaneously. It always assumes the presence of subjective factors and is characterized by more complex structure of relations between the subject and the object. Governance is associated with such notions as 'justice' and 'law'; it is a conscious process or activity aiming at achieving a specific result. This activity is based on predetermined order of conduct combined with creative acts of an agent making decisions not only on the basis of already set norms and rules, but depending on situational changes.

So, unlike regulation, *governance* is always connected with conscious human activity based on setting goals, feedback and creativity. In other words, government is always per-

formed consciously and purposefully. It presupposes both getting this or that result and finding the most optimal means to achieve the goal. Thus, general governance and *global governance* in particular cannot emerge spontaneously or naturally. It only can appear in a society and can only be developed consciously, purposefully and following certain logic, which provides specific parameters of such governance. Here, unlike regulation, one always can find an active source – *subjects of governance*, setting some goals and providing their achievement.

Governance is, thus, a higher level of *regulation*, as well as *development* is a higher form of *movement*. That is why there can be no development without movement while we can commonly see movement without development. Similarly, *governance* presupposes *regulation*, while regulation can take place (occur) without governance.

In this context we can talk about historical dynamics of development of social relations when their natural regulation was eventually complimented by governance. For example, in the period of savagery and, to a large extent, in the period of barbarity, primitive people's relations were regulated by force and the survival of the strongest. As for governing social relations in the full sense, it emerges later, together with settled way of life, labor division, formation of a state and, finally, formation of the first civilizations. Such governance is already based on the realization of certain interests and purposefulness. It does not substitute natural regulation, but rather supplements it, making social development more predictable and less controversial. This is how all social systems evolve, of which nation-states have become the largest and the best organized.

From the mid- twentieth century the situation has principally changed because due to globalization processes the whole humankind becomes a holistic system. It more and more resembles a single holistic organism based on the central parameters of social life (economic, political, and informational, *etc.*), on its interaction with natural environment, on exploring world oceans, outer space, *etc.* At the same time, in spite of the fact that international anarchy of the past gradually became more ordered, this order is not satisfactory when one takes into consideration contemporary challenges to humankind.

From this viewpoint, it is evident that humankind has reached a threshold, beyond which spontaneous regulation of social relations cannot continue any longer. It should be supplemented with conscious and purposeful building of systemic governance, because the world of global relations without effective global governance would encounter serious testing.

Nowadays our world is like a tall ship, which has so far no steering wheel, but is already being brought by wind from a relatively safe haven to the open sea. Its crew, stuck in conflicts and making no efforts to governing the ship, inevitably becomes hostage of circumstances and natural elements. The world community, having entered the era of global interdependence, should acknowledge the danger of uncontrolledness of the modern world and to start acting in concord and with purpose. If not, this state of affairs promises nothing good for the world community. Without effective governance, the world community will only slide more and more into the abyss of increasing conflicts and contradictions.

There can be another analogy to the contemporary global world – a period of human history, which Th. Hobbes metaphorically called 'war of everyone against everyone'. We all know that in that time the problem was resolved through the emergence of state as an artificial body able to provide peace and order both locally and globally. Hobbes compared it to Leviathan – a biblical monster possessing immeasurable power (see Hobbes 1991).

Has the situation changed much? The world community seems to have reached the same situation of 'war of everyone against everyone'. The difference is that this now global and, in fact, non-regulated confrontation is not between separate people but between sovereign nation-states together with various international bodies and organizations.

How is Global Governance Possible?

This state of affairs in the absence of global ethics, global law and universally recognized human values, drags the world community into the situation of struggle for survival.

As a result, most international contradictions and discussions are resolved by power policy. Power is not necessarily represented in a brutal and rough form. Quite often, especially in the economic sphere, coercion is exercised through soft power. Anyhow, the one who is stronger and more sophisticated, the one with advantages and pursuing uncontrollably selfish interests, wins.

In this situation, the UN is practically powerless, although seems to be the only institution for us to rely on. This organization was created in a different epoch and for resolving issues other than governing the global world, such as, first of all, prevention of the new world war and performing regulatory functions worldwide. It would be naïve to think that the reform of the UN as such can change anything cardinally.² At the same time, new attempts are made to respond serious challenges. New global and regional supranational organizations emerge, such as G8, G20, the World Trade Organization, the World Bank, the European Union, Shanghai Cooperation Organization, *etc.* But one should not be mesmerized by these structures. They are built to provide cooperative efforts at regional and global levels and they somehow manage to do it. At the same time, these organizations do not solve and are by and large unable to solve the main contradictions of our time formulated above.

First, all of them represent only a certain part of humankind, a region or a separated sphere of social activity. Without representing the world as a whole and in its different aspects, any governance is doomed to be, at least, limited.

Second, such organizations at the worldwide scale are only able, at their best, to perform some regulative functions, being not appropriate for governing world system as a whole.

It is not surprising that nearly all global projects of the last days, of which 'Peaceful coexistence', 'Sustainable development', 'Multiculturalism' and some other are the most well-known ones, provide no desirable results or even prove to be invalid. It happens because, as it has been mentioned above, we have no adequate mechanisms to realize them successfully.

As a result, the conflict of interest in the global world increases, reinforced by growing openness and accessibility of information, which becomes the most important resource and an effective tool for governing social processes, including distant governance. This is why dispersed oppositions in various countries act with such coordination and can overthrow governments in the course of so-called 'colored', or 'Twitter' revolutions.

Thus, modern humankind simply has no alternative but global governance, which should be created at all costs and as soon as possible. It does not matter, whether it will be something like a world state or some supra-national structures to govern the world community. Evidently, the world government, so much spoken about, would be insufficient. It is important to understand that executive power (government) without other branches,

² This topical issue is still widely and vigorously debated.

structures and institutions of power would not be able to act. I will return to this issue; now I should stress that to solve this task, one should answer several principal questions:

- How is global governance generally possible and what is the logic of this governance?
- What are the main tasks of global governance?
- What preconditions for the creation of the global governance already exist in contemporary world?
- What kind of present international organizations and bodies fit (or will be able to fit after some degree of reform) the essence and principles of global governance?
- What obstacles can be found on the way towards creating global governance?
- What principal decisions and at what level should be made as the first and the following steps in achieving the goals set?
- Who can and should take responsibility for developing global governance?
- Finally, what are the costs and who should pay them?

So, to answer the above-listed questions, one should first answer the most important one: *Is global governance generally possible, and if 'yes', then, 'how'?*

History allows us to face the future with some optimism. Since the modern age and the emergence of the first ideas to make social life peaceful universally and up to now, when this task became paramount, humankind, beyond doubt, has collected some theoretical and practical results in this sphere. Serious contributions to the theory and philosophy of human unity and world (planetary) government were made by John Lock, Immanuel Kant, Vladimir Solovyov, Nikolai Berdyaev, Pierre Teilhard de Chardin, Vladimir Vernadsky, Karl Jaspers, Ferdinand Tönnies, Thorstein Veblen, Bertrand Russell, Albert Einstein, Norbert Elias, Saul Mendlowitz, Helmut Schmidt, Aurelio Peccei, Andrei Sakharov, Amitai Etzioni, Richard Falk, Friedrich Kratochvil, Carl Friedrich von Weizsäcker, Ervin Laszlo, Glen Martin and others.

Summing up the heritage in this sphere of knowledge, one can say that all speculations, theories and ideas on common destiny of humankind, global governance, world government and so on, have, as a rule, one goal: to find ways and means to achieve peaceful coexistence of peoples while preserving their cultural identity. Kant, for example, as early as in 1795 when thinking about possibility and principles of reason-based social governance wrote in his famous treatise *'Zum Ewigen Frieden'* that eternal peace is not an empty speculation but a task which is being gradually solved and is approaching its realization (Kant 1966: 309).

To confirm that the famous philosopher was right, one can point to a constantly growing interest to this problem and to numerous public organizations that emerged in the last decades. Their names speak for themselves: the World Constitution and Parliament Association, World Federalist Association, World Federalist Movement, World Union, World Citizens Movement, *etc.* (Mazour and Chumakov 2006: 131).

If one looks at practical issues, it cannot go unnoticed that the world community has accumulated, during its long history, a significant experience of governing large social systems – states, empires, kingdoms, confederations, unions, blocs, *etc.* The *state* has proven in practice to be the most widespread and enduring form of organizing social life.

Morality and law are the central instruments of social governance, through which one can provide the strongest influence on social consciousness and human behavior. We should also emphasize *ideology, politics, economy, finance, culture, etc.*, through which social systems are also directly or indirectly governed. But *morality and law*, no doubt, dominate these factors, because they literally penetrate and link together all other

spheres of social life, being, in this or that way, subdued to moral and legal norms and laws.

Today, when multi-aspect globalization makes the whole world community a holistic planetary system, governing this mega-system becomes a demand of the time and it should be built taking into consideration the whole experience accumulated by humankind in this sphere. It seems evident that global governance should be based on the historically tested principle of separation of *legislative, executive and judicial* powers.

In this regard one can and should talk not just (as usual) about *World Government (executive power)* but also about a *World Parliament (legislative power)* and *Global Law System (judicial power)*, based on global law. To see them realized, as well as to form an effective planetary system of governance, we should create adequate conditions, of which the most important are the following:

Universally recognized moral foundations, meaning that we should form universal values and universal morality for the planet. They should not replace, but enforce and amplify morality and values of different peoples. It seems that the Universal Declaration of Human Rights, equating all people in their right to life, freedom and property, should be the starting point for the formation of such a morality.

A single legal system is another necessary condition for global governance, together with a planetary system of adaptation and implementation of legal norms universal for all countries and peoples. We should emphasize that here we speak not about international law, which is already well-developed at the level of interstate and regional relations, but about global law, which would be really universal. Such a law does not presuppose abolishment of legal systems of separate states or regional structures, of international legal acts and institutions. It is important, but the national/regional law should be brought with correspondence with the global law and should not contradict it.

Global governance also means *providing cooperative security* and uniting efforts in maintaining it through various forms of cooperation. First of all, we talk about *economic cooperation*, which already successfully evolves in the modern world in the form of multinational corporations, consortiums, joint ventures, *etc.* World trade has already made all peoples of the planet involved into the single market of labor, goods and services.

Planetary *political cooperation* is the next necessary condition for global governance. It should provide resolution of conflicts and peaceful coexistence through compromising and resolving disputes taking into consideration the maximum of interests of different parts. Global political cooperation, unlike economic cooperation, still is to be developed because in this sphere relations are built so far on the absolute priority of national and corporate interests.

Military cooperation, existing nowadays at the regional level and meeting the defense tasks of separate countries and peoples (*i.e.* protecting them from external threats), should be replaced by police forces providing law and order, protection from criminal activities.

The recent world financial crisis has shown once again that *coordinated planetary financial policy* is a necessary condition for global governance. It is evident that it is hard and even impossible to implement coordinated financial policy without a single currency.

Religious tolerance and separation of church (religious institutions) from institutions (structures) of global governance is necessary as the most important condition for peaceful coexistence and constructive interaction of different people, independent of their religious beliefs or non-beliefs.

Scientific and technological cooperation as well as cooperation in the sphere of health and education presupposes creating conditions for a balanced cultural and social development of various continents and regions of the planet.

A *common (world) language* for international communication is needed to support conversation in various spheres of social life and to develop intercultural interaction. A well-known Korean philosopher Yersu Kim mentions (2009: 191) that language may be compared with culture: as well as culture itself is a system of symbolic meanings serving common needs of its members.

Of course, we have not listed all conditions needed for creating a system of global governance. But these are the most important ones, without which all the rest will make no sense.

Who is Responsible?

Now a few words regarding *what principal decisions and at what level should be made initially and afterwards to achieve the goals set*.

Decisions concerning building the global system of governance should be made, of course, at the planetary level. A World Conference, roughly analogical to the World environmental conference in Rio de Janeiro (1992), could become the first step. It could also be a world summit of heads of all states, which would work out principal approaches to global governance. In the future operative-tactical and strategic decisions would become more often the prerogative of the newly emerging structures.

Finally, *who can and should take responsibility for building global governance and what are the costs and who should pay them?*

First of all, this responsibility lies on the world academic, political and business elites, that is on people having adequate worldview, possessing necessary knowledge, have the strongest authorities and material resources. On the other hand, the most affluent countries and alliances (the USA, the EU, China, Russia, India, Brazil and others) should take initial basic responsibility for building the system of global governance. They also should carry the main burden of financial support of a reform of modern international relations. This does not mean, however, that there should be countries or nations at our planet, which would be free from their own reasonable contribution into common expenses.

Some may say that this is all a utopia, and that global governance is impossible, and the supporting arguments listed above are insufficient. This viewpoint has its right to exist, because we cannot so far provide a final proof of the truth of our statements. Some can question the appropriateness and sequence of the steps proposed and they may also be right, because we discuss a topic unprecedented in human history. That is why it is so important to consider the issue of global governance in all its aspects, including philosophy, which, unlike science, is oriented not so much towards finding concrete, final solutions but towards broadening the scope of various approaches to solve a problem. Such philosophical analysis is especially valuable where exact scientific methods have not been worked out yet, but the situation does need immediate resolution. The problem of governing the contemporary global world is such a case.

Dialogue as a Way to Overcome Problems

So, if we take into considerations the above said, today in the global world political decisions between rationality and demands of wisdom and the dialogue of cultures and civilizations are the only possible way to resolve contradictions in a constructive way and to

provide a balanced social development both at the national and global levels. But they have their limits defined by the following points.

First, approaches based on a separate 'dialogue of cultures' or 'dialogue of civilizations' are not successful, because they do not reflect the genuine (cultural-cum-civilizational) nature of social life, which is a combination of cultural achievements and civilizational relations of society.

Second, every culture is initially self-sufficient and is eager to preserve its identity. Therefore, a constructive dialogue based on culture alone is impossible; one should not expect much from intercultural dialogue and count on bringing different cultural positions close to each other. At the same time, one should not be too pessimistic.

And the higher is the level of civilizational development of the interacting parties, the more productive this dialogue can be. However, the level of civilizational development of various nations and humanity as a whole still remains very low. Even the academic community does not fully understand that the level of development of civilization of this or that people (a country, a collective, an individual) is the other side of their cultural development. That is why the policy of multiculturalism, not considering the civilizational gap in the development of various cultures, has been, in fact, seriously defeated not only in Europe but in other countries and regions as well.

One cannot agree with Samuel Huntington talking about 'clash of civilizations'. In fact, we deal with confrontation of different 'cultural-cum-civilizational' systems (the West and the East, capitalism and socialism, Islam and Christianity, *etc.*), where they confront one another on the basis of cultures but interact on the basis of civilization. This creates multiplicity of cultural-cum-civilizational systems.

Thus, the cultural-cum-civilizational dialogue implies admitting the multipolarity of the contemporary global world. And to make it effective we need common civilizational principles of social organization, of which the most important are the following:

- recognizing and protecting basic human rights;
- a conventional system of ethical norms and values (universal morality);
- a single legal system (global law);
- religious tolerance and freedom of consciousness.

Responsibility for building such principles and providing conditions for a productive dialogue in the global world lies, first of all, on the world political, academic and business elites, as well as on nation-states as the largest *organized* social systems.

And, if the measure of responsibility of politicians depends on their position, the level of states' responsibility depends directly on their role in the global system of economic, military, political and cultural relations.

Lessons from the World Crisis and Conclusions

The decisions on the creation of the global system of governance should be made, of course, at the planetary level.

And we must say that apart from states and intergovernmental organizations two major factors have emerged in world policy by now: global business and global civil society. They seem to become the main components of the nascent global governance mechanism.

One should expect the partnership of these structures to become dominant at all levels – global, regional and local – in the near future.

Solving the task of global governance humankind needs to overcome an important psychological barrier. For centuries the state remained at the core of international rela-

tions; these relations seem to be impossible without states. Now, globalization more and more eliminates the differences between internal and external economic and social processes. Intrastate regulators are losing their autonomy and have to act in cooperation with other states, large multinational and world civil society. Governing alliances are formed, where the state interacts with civil society and private business.

With increasing globalization, the transnational relations expand and world civil society becomes more and more visible. This process is supported, first, by the growing number of problems encountered by most (or even all) countries. Second, rapid development of the means of international communication, such as Internet, makes the consolidated activity of national civil societies much easier.

Thus, the global civil society as a system of non-governmental and non-commercial organizations, concerned with the destiny of the world community, will increasingly play its role of one of the world society' regulators, alongside with business and, surely, the state.

At the same time, in this emerging global governance system the separate states are expected to be not sovereign and all-powerful masters of their territories, but one of the elements of a supra-state mechanism for regulating global processes. This mechanism will not be habitually hierarchical, but rather network-like. National power structures, being remnants of the previous era, may become hubs of the nascent global governance network.

In conclusion, I would like to note that it is impossible by simple means to overcome the differing interests of the countries that are at different stages of economic development. Possible compromises are also very limited, as the range of differences is too great. But the path of small compromise is, apparently, the only one which in the future could reduce global risks associated with inequality. The development of new and the reform of existing principles of global governance should be among the priority tasks of all national governments and international organizations. No need to tackle the great challenges immediately – it will be very difficult or even impossible to resolve it given divergence of interests. But, taking slow steps to each other, in the future you can get close so that the contradictions will cease to be insurmountable.

If at some point it becomes clear that the bar is set too high and is insurmountable, we should lower it and continue our efforts. The convergence of countries, especially in the sphere of trade, is a necessary prerequisite for reduction of the risks in many spheres, including economy.

References

- Hobbes, Th. 1991.** *Leviathan. Collected Works*. 2 vols. Vol. 2. Moscow: Mysl. *In Russian*.
- Kant, I. 1966.** *Perpetual Peace. Collected Works*. 6 vols. Vol. 6. Moscow: Mysl. *In Russian*.
- Mazour, I. I., and Chumakov, A. N. 2006. (Eds.).** *Globalistics: International Cross-Disciplinary Dictionary*. Moscow – Saint Petersburg – New York: Elima, Piter. *In Russian*.
- Weber, A. B. 2009.** Systemic World and the Problem of Global Governance. *Vek Globalizatsii* 1: 3–15. *In Russian*.
- Yersu Kim 2009.** An Idea of University in an Age of Diversity and Transformation. In Kucuradi, I. (ed.), *Papers of the 2007 World Philosophy Day* (p. 191). Ankara: Philosophical Society of Turkey.

Making Sense of History? Thinking about International Relations

Fabien Schang

Can international relations (IR) be a distinctive discipline? In the present paper I argue that such a discipline would be a social science that could be formulated within the perspective of comparative paradigms. The objections to scientific methods are thus overcome by the logic of international oppositions, in other words a model takes several paradigms into account and considers three kinds of foreign relation (enemy, friend, and rival) in the light of three main questions: what is IR about (ontology); what does relate therein (epistemology); and how to assess such a relation (logic).

Keywords: international relations (IR), state, nation, country, foreign policy.

Introduction: What is IR?

Roughly speaking, the ‘international relations’ is the study of relations among nations. Therefore, it deals with foreign policy. But what does a ‘nation’ mean as distinct from its twin concept of a state? In the present paper I would like to deal with this issue by investigating the foundations of the so-called theory of international relations (hereafter, IR), together with the possibility of its formalization from a logical point of view. In what follows, I investigate three main domains helping to face this challenge having assumed a formal philosophy of global processes for the method of my study.

Ontology (who?)

The first domain is the *ontology* of IR: What sort of being is there, that is what are the political categories that matter in such a discipline? Ontology is the domain of philosophy concerned with the identity of agents; in short, it purports to answer the following question: What are the relata a, b in any international relations of the form $R(a, b)$? The plausible candidates for these are states, regional alliances, transnational firms, non-governmental organizations, mere individuals, and the like.

Epistemology (what?)

The second domain is the epistemology of IR which concerns the relation R in itself, namely: What is the nature of the relation between any two specified relata?

Because of the troublesome distinction between facts and interpretations, the problem here is how to characterize a relation: by means of a natural or a human science whose methodological rules crucially differ. As the German philosopher of culture Wilhelm Dilthey (1833–1911) stated, ‘We explain nature; we understand psychic life’. For this reason, a genuine theory of IR should be clarified either through the explanation (causal dis-

course) or through the understanding (intentional discourse) it is supposed to provide in order to make sense of any given 'fact'.

On the one hand, the sort of discourse attached to a given political event may differ following the Aristotelian fourfold set of *causes*, whether these are material (the material conditions under which an event happen), efficient (the agents who caused the event), formal (the definition of the event), or final (the reason why some event was provoked by some agents).

On the other hand, the kind of cause the IR theorist tends to choose actually depends upon the sort of questions she/he naturally asks before making her/his point; indeed, questions make sense of events and relevantly betray the questioner's assumptions. We will return to this crucial role of questions with the case of *paradigms*, as implicit theoretical representations in the construction of IR. This role is all the more crucial for whoever doubts the positivist view that facts are transparent data.

To put it bluntly: what is a fact? Against the positivist dream of a Sirius point from which any situation could be easily depicted, it hardly makes sense to assume a theorist asking neutral questions. A radically opposed view has been endorsed by the Frankfurt School and famously stated by the post-positivist Robert Cox in the following words: 'Theory is always for someone and for some purpose', thus discarding the common belief in bare facts. Correspondingly, the choice of specific questions to make sense of political events may lead to such paradigms as realism, liberalism, or some more fine-grained variants. Their level of abstraction may vary, according to the theoretical concerns that make them arise: any investigation about the geopolitical strategy of a state leads to technical questions about material resources, for example, while a larger reflection about the motivations of mankind resort to the more general domain of political philosophy and leads to what may be called 'meta-questions' (abstract questions about more concrete questions).

To account for the complexification of world politics throughout the notion of *globalization*, the paper aims at describing the transition from state-centred relations to Global Studies by means of an inquiry into the construction of a world space and through the set of social interrelation networks. Such a large-scale ambition may lead to a disciplinary holism, in the sense that such a large topic as IR calls for a number of related disciplines from politics to other social sciences like sociology (religion and culture), anthropology (human nature), psychology (folk behavior, statesmen's rationale), or economics (geopolitical motivations).

A natural objection to this project concerns its philosophical flavor. After all, the story of the world patently showed how the history of ideas departs from the history of nations. From Plato's expedition in Syracuse to utopian speculations, recall these words by Frederick II of Prussia (1712–1786) that summarize some reluctance in the air at floating abstractions, 'If I wished to punish a province, I would have it governed by philosophers'. The king argued by these words against the liberal-minded view of Enlightenment philosophers, among which Rousseau's concept of general will or Kant's project of perpetual peace. At the same time, it should be noted that not every philosopher is a liberal thinker. Think about Hobbes' republican absolutism, or Heidegger's fascination for the Third Reich. Notwithstanding a common opinion of the effect that philosophy distorts reality, I would reply that the present paper aims at a philosophy for IR rather than a theory of IR

for philosophers. In short, the point is not to give a prescriptive view of what IR *should* be but, rather, to think speculatively about what IR *might* be, without any definite answer and by means of proper interrogative methods.

Accordingly, philosophy is not to be taken as a field of ideologists or idealists opposed to the so-called ‘internationalists’, that is the theorists of IR whose favored domain would be the field of action and pragmatics. There are two main objectives of the next sections: to break with this shared view and to show how both domains are interrelated.

Logic (how?)

Finally, the third domain is the logic of IR: How to account for the sort of relation R between the relata a, b in $R(a, b)$?

Against a positivist stance that claims to penetrate reality and its facts with one-sided answers, the primary role I impute to questions in the very process of a theory leads to a ‘logic of IR’ in a larger sense of the word, that is a guess-who game, where a variety of questions makes sense of political events without giving a final answer to the question how the world politics is ruled. While this method has already been applied in other contexts by means of a so-called Question-Answer Semantics (see, *e.g.*, Schang 2012), I suggest to organize the content of IR in the form of a qualitative model with coefficients (see Section 3).

By doing so, a difference must be made between what is meant by a *paradigm* and an *ideology* (compare with the debate between Kuhn and Feyerabend about the legitimacy of natural science) and be able to overcome the oversimplifying dichotomy between philosophy (orating about morality) and politics (aiming at efficiency). In particular, such an enterprise amounts to a formalization of IR towards a continuist dynamics: enduring questions may lead to changing answers, in order to account for (giving a sense to) the theory of IR and its numerous ‘-isms’ (realism, liberalism, neo-structuralism, culturalism, marxism, constructivism, and so on). In case of successful results, formal epistemology of IR has to clarify their technical parlance and numerous concepts related to the previous areas of ontology and epistemology. A sample of it is given by what the French internationalist Jean-Louis Martres said about his German fellow Alexander Wendt (who depicts himself as a ‘constructivist’ or second-rank theorist, strives to establish the identity of neo-liberal and neo-realist views, both relying upon an ‘ontological atomism and an epistemological positivism’); in short, Martres blames both neo-liberal and neo-realist theories for reifying instances, whether the agent, the state, or the world system (Martres 2008: 34).

Let us review in detail the way in which IR can be characterized in its foundations and prospects.

1. The Object: State vs Country

Let us consider again the primary question: what is the object of IR?

The traditional answer is *state-centrism*, according to which the IR deals with nothing but states since the Treaty of Westphalia (1648). In the same vein, the French politologist Raymond Aron (1905–1983) depicted IR as the set of relations between states that are endowed with the monopoly of legitimate physical violence (for external war and inner repression). This means that political relations are uniquely about states, insofar as these rule armies and are entitled to declare war against foreign powers. The American internationalist Kenneth Waltz (1924–2013) summed up this classical view by a *reductio* argument, ‘For what can act on the international scene, if not states?’

In contradistinction to such a mainstream approach, I want to formulate a plea for political pluralism which is an alternative view stating that IR is not so much about states or even nations than *countries*, so to a wide extent it is the agents that matter. Thus, the English Susan Strange was depicted as blaming the abuse of state-centrism in political science:

Being exclusively interested in the state (state-centrism) is oversimplifying and leads to develop a conception of political science that does not help understand human condition and does not take into account the various entities having an economic and political power (Tooze 2001: 103).

Borrowing from an analogy of the American philosopher Willard van Orman Quine, countries are not homogenous entities but, rather, force fields composed of contradictory forces. They include military forces (states), but also economic forces (multinational firms, transnational holdings, lobbies) and social movements (undergrounds organizations, ethnic minorities, leagues of civil rights). To manage these contradictory forces and ensure their foreign policy, states have to do with such 'inner enemies' to maintain their coercive force and attempt to legitimate what Aron referred to as the monopoly of physical violence. While state-centrism assumes that states are the only efficient forces in IR, the aforementioned counter-forces often occur from the public opinion, especially *medias*.

And conversely, a more comprehensive approach to IR should take into account the influential role of medias over mass beliefs: sometimes medias serve as a public weapon against the state policy; sometimes the states employ them to turn public opinion into a general will. It results in a two-fold behavior, that is to construct an official propaganda of *state-nations* or to provoke a reaction of public opinion against the state's action. The role of propaganda corroborates a previous objection to the positivist belief in bare facts, insofar as the power of mass media constructs a collective picture of reality beyond its duty to tell the truth to educated people.

Concerning the very nature of the relata a,b in the general scheme $R(a,b)$ embedding IR, a difference is to be made between state, nation, and country. Just as a *state* organizes the inner policy in a country, a *nation* means a homogeneous set of people ruled by a state (state-nation) whereas a *country* is the spatial territory on which a state rules its given nation. My emphasis upon countries thereby enlarges the scope of IR while avoiding to reify the state as a static representation of a standing nation. Instead of talking about such static elements, the general trend of the following goes towards a dynamic approach to countries as the proper relata of IR. A balance is to be found between total order and total chaos, as argued by Martres, neglecting slowness removes the agent while favoring deep forces and trends; extolling the uniqueness of a phenomenon cancels any logicality to the system of international relations and leads to chaos.

For this purpose, a reference to countries amounts to a set of moving forces whose interrelations are supposed to make sense of the worldwide history. Once the agents are identified (in a provisory way, at the very least), let us consider the nature of their relation in any foreign policy. What are they doing exactly that justifies the construction of a theory of IR?

2. The Relation: Force vs Power

Here is the second question of our inquiry: Which sort of relation stands in IR? A brief overview of the origins helps to give a preliminary answer. Let us note indeed that the discipline has been founded to understand and warrant the conditions of peace between

states; it has been created in 1919 by the Welsh sponsor David Davies, who supported the first professorship of international politics at the University College of Wales in Aberystwyth. Despite this primary goal of stable peaceful relations between states exhausted by the First World War, the breakdown of the League of Nations and the subsequent Second World War dramatically showed a patent failure of *idealist optimism* from the twenties onwards and led to the shared conclusion that international right, democracy, and free trade would not be sufficient conditions for peace. In this sense, the external anarchy between states marked the triumph of state-centrism and the related view that states are the only necessary organizations of human societies. This accounts for the fall of idealism and the rise of realism, given the historical context of the young discipline.

A philosophical, more general assessment of the situation consists in saying that the theory of IR is nothing but a social science whose agents are naturally determined by human desires, including *power*. Thus, any realist would say that she/he aims at assessing the action of states through their essential search for power. Note that while the realists equate power with the aggressive or offensive way to satisfy one's own interests, such a concept is not as clear as it stands. As a matter of fact, power has more to do with the status of a political *force* than the conditions under which it can preserve it, assuming force as a physical aggression at the forefront. In a sense, the relation of cooperation may be also viewed as a single mode of power obtained with the help of other means within a set of peaceful relations. Nevertheless, power is usually viewed as a one-sided action used by a single state for its unilateral interest. If power corresponds to a general situation of satisfaction, however, its necessary and sufficient conditions are not given unanimously among the theorists. For the ones, power requires violence as the best defense of its own interests against the others' (Thucydides, Machiavelli, Hobbes, Schmitt, and Huntington); for the others, it requires peace in order to ensure a standing and fruitful cooperation between potential partners (Rousseau, Kant, Fukuyama). Actually, the characterization of power depends on how mankind and societies are viewed from an anthropological perspective. No wonder if the historical context contributes to the answers, as witnessed by, for example, the role played by the bloody civil war of England on Thomas Hobbes (1588–1679) and his subsequent anthropological pessimism. Hence his words from the *Leviathan* (ch. XI), 'In the first place, I put for a general inclination of all mankind a perpetual and restless desire of power after power, that ceases only in death'. A similar description of mankind as a perpetual quest for maximizing power can be also found in the concepts of *conatus* (any effort to persist in being) by Baruch Spinoza (1632–1677), or the concept of *will of power* ('Wille zur Macht') by Friedrich Nietzsche (1844–1900). Between war and peace as preconditions for power, a primary dichotomy thereby occurred within the theory of IR between liberalism (or idealism) and realism. Marxism was introduced into IR only after the Second World War, to account for the economical relations between states.

Whatever the answer given to the sources of power, each of these stands for a given paradigm, that is, a system of assumptions, concepts, values, and practices that constitutes a way of viewing reality. The role of paradigms in the theoretical construction of IR was represented as follows:

Etymologically speaking, 'paradigm' means 'declination' and, without altering the sense, we can accept the view that paradigm functions as a dogma; dogma from which the sense of the object at hand can be gathered (Martres 2008: 37).

Returning to the difference between a paradigm and an ideology, the former can be taken to be a set of interrelated implicit beliefs whereas the latter reduces all these beliefs to a central one (compare with the Marxist reduction of superstructures to the economic infrastructure of production modes). In both cases, the problem concerns the way to organize values and the criteria attached to their political relevance. What is to be favored between economical and military power, for instance? Starting from a binary opposition between idealism and realism, the theory of IR increasingly introduced more complex data to explain historical events: no black-or-white scenario between either total war or total peace but, rather, a pale gray lore of interrelations between different agents and their common environment.

A large literature on IR attempts to inject some rationality behind these international facts, while attempting to justify their own paradigms at hand. Let us go through a list of such theorists and their main assumptions.

In response to the failure of British idealism, the American realist Hans Morgenthau supported a classical realism by advocating offensive power against the alleged threat of the Soviet Union.

Then the complex evolution of the Cold War was paralleled by a general reflection about *international regimes* in the eighties and nineties, to do justice to the role of common objectives among the states through regular international institutions or general agreements.

Although most of the theorists agree about the situation of *anarchy* between states (no higher authority rules them over and above their own sovereignty), the existence of regional or worldwide organizations (UNO, NATO, and the like) refined the notion of anarchy in three ways: in a Hobbesian (states are mutual enemies), Lockean (states are mutual rivals), or Kantian (states are mutual friends) sense of the word. By augmenting the binary opposition friend-enemy with a third intermediary term of rivalry (following Carl Schmitt in this respect), Kenneth Waltz took the logic of Lockean anarchy to be the prominent way to understand the contemporary history (Waltz 2003); it resulted in a so-called neo-realism, or structural realism, that differs from the classical version by strengthening the role of economic relations towards the global task of sustaining power.

In other words, realists and idealists are at odds as to the fundamental objectives of a state; nevertheless, they may agree about the way to achieve it as in the common objective of economic growth (among the liberal-minded defenders of idealism and the neo-realists). For example, Robert Gilpin equally defends neo-realism by arguing that economy takes growing interest in coercive relations; while Andrew Moravcsik claims that the rational individual is prime and supports neo-liberalism against the realist assumption of state-centrism. But trading is at any rate the central factor that most of the international relations rely upon, whether in a competing or in a friendlier way.

Given the increasing influence of commercial relations after the Second World War and the ensuing hegemony of the United States, a large network of interrelations has developed between the states until then. The upshot is a number of more or less cooperative agreements, thus favoring a global *status quo* around two blocks (Western vs. Eastern blocks) with economic pressures and nuclear weapons as their major arguments. Therefore, the history of the post-war world led to a number of more intricate paradigms be-

tween the absolute relations of peace and war. On the one hand, the school of Neo-Marxists (also known as dependency theory) emerged with Immanuel Wallerstein or Johan Galtung during the period of decolonization, rendering the American hegemony in terms of dominant centers and dominated peripheries. On the other hand, the development of information through mass media strengthened the role of public opinion in the collective decisions; it followed from it some impetus on *soft constructivism* and *transnationalism*. The former has been famously formulated by Alexander Wendt as follows, 'Anarchy is what states make of it', in order to turn the realists' negative connotation of anarchy into a more positive field of rational and responsible relations between states. The latter weakens the role of these states in the international relations, stressing upon the complex interdependence of collective institutions around the states like non-governmental organizations and economic firms. Joseph Nye described this globalized situation in terms of *soft power*, according to which the states try to defend their interests by means of cooptation rather than the classical coercion of *hard power*. Likewise, James Rosenau argued for a general situation of interstate or multi-centered sphere between interdependent states. Again, the binary opposition of peace and war has been muddled by the historical context of the postwar world: Bretton Woods, oil crisis and liberal values produced a multi-polar framework where rigid masters and servants turned into flexible sellers and clients.

That is a sketchy (not exhaustive) overview of the paradigms in IR, from the idealist sources of the theory to its interdisciplinary stance. To put all of this in order, a question naturally arises: How many schools or paradigms can there be in the discipline? To answer this question requires a capacity to specify the sort of questions that make sense of such worldwide relations between states or broader decision groups: the more questions there should be to define the properties of foreign relations, the more paradigms there can be to assign a definite value to each of these and establish a resulting hierarchy between them.

Note that such a debate already occurred within the 'Four Great Debates' of the theory of IR, concerning the opposition between traditional and behaviorists: Morton Kaplan advocated the use of quantitative methods to characterize the relations between states, whereas Hedley Bull blamed the latter for not taking the random character of human decisions into account. Between science and art, or determination and wisdom, a division occurred as to the role of exact sciences while some of the writers called for the knowledge of balance theory, game theory of complex systems to model international relations. Does it make sense to use formal tools into a social science, insofar as the latter primarily deals with agent's intentions? How to find room inside such a debate between positivists and post-positivists, in order to make of history without reducing it to a mechanist and continuous line?

3. The Value of the Relation: A Comparative Logic

A general logic is to be found for the discipline, but not in the sense of explaining the occurrence of foreign relations by means of computing data. Rather, the point is to find a way to understand the reasons underlying any expected or unexpected relation between states or broader items like countries.

For one thing, the theory of IR is naturally concerned with *truth* in two respects. It ought to respect the criteria of *formal* (or logical) truth as any normal science, insofar as science aims at truth by obeying criteria like consistency. Moreover, it is obviously con-

cerned with *material* truth but should not access to it by a mere observation of allegedly bare facts: again, facts and interpretations cannot be disentangled in scientific theories. To discard the black-and-white picture of reality, Quine (1960: 374) noticed the point that ‘The lore of our fathers is a fabric of sentences. A pale gray lore, black with fact and white with convention’. This means that one and the same political relation may take different meanings in different theories, that is depending upon the paradigm adopted to make sense of it. A way has been devised to go beyond the naïve distinction between facts and interpretations, thus referring to the Chinese Yixing that emerged during the Warring States Period (around 475–221 BC) for political motivations. Thus,

it is easy to imagine, by resorting to the fundamental matrices of Chinese thought, the construction of a theory of international relations which, ignoring the Western binary distinction between Good and Evil, would give a much better account of the genuine sense of international politics (Martres 2008: 36).

I see a connection between this Eastern reference and IR, since I developed elsewhere (see Schang 2011) a translation of the Yiking in the form of Boolean bitstrings that express the context-sensitive identity of any meaningful sources of information. In our present case, this purports to give a definite number of criteria to characterize the identity of context-sensitive countries within our globalized world.

Consider a ‘guess-who’ game for IR, assuming that there is a finite number of maximally relevant questions to define the foreign relations between countries. Let us say that any yes-answer corresponds to an agreement, that is a *friendly* relation between two relata *a* and *b*, whereas any no-answer expresses a disagreement, that is an *unfriendly* relation between them. Four questions are meant to discriminate international relations between countries, viz. q_1 : ‘military agreement?’; q_2 : ‘economic agreement?’; q_3 : ‘cultural agreement?’; q_4 : ‘social agreement?’. The source of agreement between countries relates to what is investigated in *geopolitics*, and the previous questions represent a set of meta-questions to assess such relations. Indeed, any agreement between countries can be established by the existence of international alliances, whether military, economical, or even cultural: EU, NATO, NAFTA, Mercosur, and the like. It can also be obtained according to the compatibility of their political system (democracy, dictatorship, *etc.*), their population (ethnic, religious kinship), or their standard of living (employment, way of life, mentalities). Furthermore, the main import of paradigms is to establish a hierarchy between the previous domains included into the questions: the realists favor military over economic criterion; and the other way around for the liberals. In a context-sensitive process of identification, the relations are defined from a reference country to make sense of the answers.

Following some previous works about the *logic of opposition* in Schang (2012), let us state that the logical value of a country varies according to this basic reference of a country. In the context of the Cold War, for example, the United States could be given as such a reference (or hegemonic) country. What are the foreign relations between the latter and other countries like Yugoslavia, the USSR, France, or Poland? Let ‘1’ be the symbol of a yes-answer and ‘0’ be a no-answer, this yields a set of logical values (an ordered set of answers *A*) to our preceding four questions: $A(\text{Yugoslavia}) - 0100$, $A(\text{USSR}) - 0000$, $A(\text{France}) - 1110$, and $A(\text{Poland}) - 0010$. Following the definition of the logical relations of opposition, any two countries are said to stand into a normal friendship if and only if they are subcontrary to each other – they have at last one common yes-answer, while they

stand into a mere non-friendship (as either rivals or enemies) if and only if they are contradictory or even contrary to each other – they have no common yes-answer. How to make sense of the difference between contradiction and contrariety in IR, taking to be granted that such logical relations lead to a mutually hostile relation? Let us say that any two countries are mutual *enemies* whenever they are incompatible *relata*, and *friends* (allies) as compatible *relata*. Insofar as international relations are more dynamic than static processes, we can refer to a relation of political *integration* between a given country and a reference country whenever there are more yes-answers than no-answers between them; as to the relation of political *assimilation*, it means that there are only yes-answers (no distinction) between these. A political *preference* between countries can be stated as follows: any country *a* prefers *b* to *c* if and only if the logical value of *b* is less different with *a*'s one than *c*'s one is. A *balance of power* obtains within a set of related countries once these are balanced poles with equivalent forces (logical values).

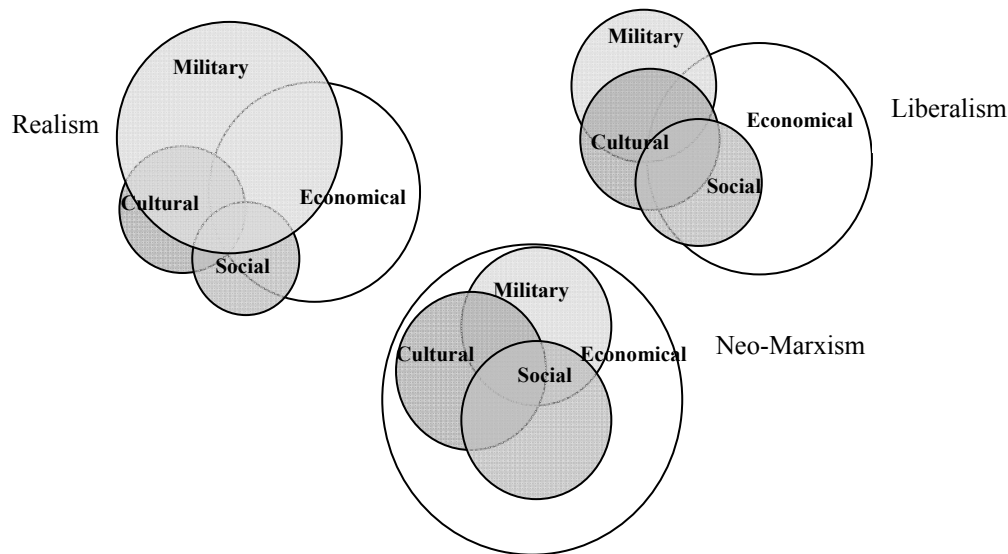
In accordance to the notion of hegemony, the assumed hierarchy within friendly groups can be determined by their *power measurement*. Thus, a country can be said to be *strong* according to a set of criteria. The military criterion includes army capacity, technical equipment, and nuclear force. The economic criterion relies upon features like self-sufficiency, or business resources (production, subsoil resources). The cultural criterion can be equated with cultural data like the religious or linguistic sources of a country. Finally, the social criterion refers to some inner harmony from base (public opinion) to tip (state). Now what is the hierarchy between these criteria themselves? It depends upon which paradigms are mentioned to order them, and a criterion for measurement can make use of *coefficients* in this respect (see Fig. 1). That is, the *power* of a country (superpower, average power, lower power) is characterized by the sum of its coefficients, and a reference country corresponds to any country such that its sum is *maximal* in a given pole (set of countries).

To sum up, such a question-answer game results in a logic of IR that wants to account for the difference between enemies, rivals, and friends by more fine-grained relations than unique yes- and no-answers.

There are some advantages in such a game. On the one hand, no *quantitative* methods from natural science have been used in the preceding presentation. As a reply to post-positivists, this means that not any logical approach to the IR leads to mechanic equations. On the other hand, such an 'IR game' goes beyond the realist paradigm by taking into account the role of paradigms through the various coefficients assigned to each ordered question (definitional criterion of context-sensitive countries).

There are some defects related to these political oppositions, however. Firstly, the number of questions required to individuate countries remains undetermined. Secondly, the logical calculus hinges upon paradigms which lead to a variable hierarchy of the criteria. Thirdly, there may be some *interdependence* between the given criteria of economy, culture, and social condition (following the statements of Marxists and constructivists). Fourthly, the amount of a given coefficient should be given by means of quantitative measurements after all; while it arguably corresponds to a quantity of efficient equipment in the military domains, any quantification of the cultural or social areas is a more troublesome affair.

Fig. 1. The criteria of power and their coefficients according to three main paradigms



A number of technical challenges remain open within such a logic of IR and its foundations, accordingly. Let us quote three of these. Two of these are about the nature of foreign relations: Why need not 'the enemies of my enemies' be my friends (calculus of opposites)? How can a given country prefer *a* to *b*, *b* to *c*, but not *a* to *c* (compare with the so-called Condorcet's Paradox)? Another one is about the criterion of identity and unity between countries: what makes them politically differ, and how many questions are required to individuate them (so as to make them minimally distinct from each other)?

4. Conclusion and Prospects (So What?)

Let us summarize the main statements of the present paper, before recalling its expected developments.

- a) The theory of IR is centered on *countries*, rather than states.
- b) It relies upon a variety of *paradigms*.

These can be summarized in two main questions, namely: what the countries want above all, and how they proceed for this purpose. The variety of corresponding answers leads to a variety of paradigms, mostly based upon two core concepts: *force* (to be opposed to cooperation, and distinguished from the broader notion of power) and *state*. Thus, realism emphasizes the role of states to maximize the force of any homogeneous country; and conversely, liberals tamper the notion of power in the sense of a cooperative relation while sustaining the central role of states in the realm of international relations.

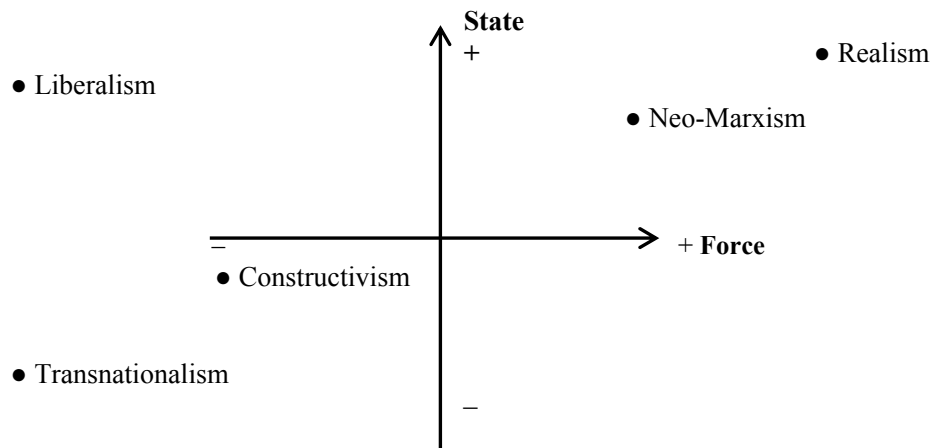
- c) No such paradigm normally prevails over the others, because IR is a *social* science.

As a matter of fact, this sensibly differs from what is meant by a 'normal' science as any discipline which ought to change its theory after a scientific revolution: according to Thomas Kuhn's related works, the uniqueness of paradigms in natural science is warranted by the fact that the rule of *consistency* prevents several paradigms from ruling a given science at once. If so, then IR proceeds as a *non-normal* science accordingly.

d) IR is an interdisciplinary social science requiring an investigation into human *beliefs* and *intentions*.

Such a context-sensitive discipline must cope with randomness, thus leading to a set of unpredictable coefficients in the 'IR game'.

Fig. 2. A diagram for IR through two main imports: force and state



This formal epistemology of IR gives room for a number of prospects to implement its content. Three of these can be stated as follows. For one thing, the ontology of IR is based on *countries*, hence the need of a contemporary history of countries to characterize their relative identity and subsequent relations. Then, the role of opinions with respect to the construction of public opinions demands an investigation into mass media as belief formers; such is the task of a so-called *mediology*. Last, but not least, the crucial role of criteria to make sense of relations between dynamic countries assumes a preliminary analysis of *paradigms* in the theory of IR.

References

- Martres, J.-L. 2008.** De la nécessité d'une théorie des relations internationales (l'illusion paradigmatique). In Berges, M. (ed.), *Penser les relations internationales* (pp. 19–47). Paris: L'Harmattan.
- Quine, W. van O. 1960.** Carnap and Logical Truth. *Synthese* 12: 350–374.
- Schang, F. 2012.** Abstract Logic of Oppositions. *Logic and Logical Philosophy* 21: 415–438.
- Schang, F. 2011.** *An Arithmetization of Logical Oppositions*. Paper presented at the World Congress LMPS. Nancy, July 19–26.
- Tooze, R. 2001.** Susan Strange et l'économie politique internationale. *L'Economie politique* 10: 101–112.
- Waltz, K. 2003.** *Conversation with History*. February, 10. URL: <http://globetrotter.berkeley.edu/people3/Waltz/waltz-con0.html>.

Political Culture: The Features of Political Decision Making in the Context of Globalization

Ksenia K. Kostina

The subject of this article is the impact of globalization on the political decision-making process and the necessity to change the theory of political decision making because of the new circumstances of current political reality.

Keywords: *political culture, decision making, globalization, political action.*

The late twentieth century brought about the recognition that the world had become, in Marshall McLuhan's words, a 'global village' (McLuhan 1996). The phenomenon of globalization has completely changed our perception of politics and of the nature of political interaction. The traditional view of politics used to be state-centric: the state was treated as the principal political actor, and attention was focused on the national level of government activity. Therefore, there was a clear distinction between domestic and foreign politics. Although nation-states continue to be the most significant actors in the world arena, one can hardly deny the growing impact of supranational bodies and transnational groups and organizations.

Anyway, in the twentieth century, all philosophical schools of thought took the state and the state system for granted in politics, and therefore the task of political science was to proceed from this assumption and draw out its implications. In other words, the state was considered as a vehicle through which politics was conducted. The remaining questions in Political Philosophy concerns the way one should understand the state and its relations to other forms of association, or the way the state power could be used to solve social problems. For the utilitarians and pragmatists in particular, political theory became a form of problem-solving and with a growth of cognitive disciplines such as Economics and Law, many traditional issues of political theory were transformed into a technical matter best left to 'experts'. This is also true for decision-making theory.

But, unfortunately, in the early twenty-first century, in the era of 'facilitated knowledge', political science is characterized by a considerable simplification. The prevalence of practical experience and political technologies prevent our assessing the current status of the decision-making theory. We should re-examine the existing methods of political science in terms of their congruence to the current situation in public administration in the context of globalization.

Actually, the dominance of political technologies approach has become the reason why a political decision is not investigated as a philosophical category. Thus, many statements, machinery, and technology in the decision-making theory can no longer work in full within current political reality, in the world of globalization. Concentrated on technology and strategy, we forget about the complexity of such phenomena as a political issue,

political challenge, political solution, and political space. At present, the decision-making theory is more a technology, rather than a system of ideas and principles.

In fact, the category of political decision is substantially similar to the category of political action that unfolds in space and time, it is based on some contacts and relations formed on the basis of information and values and put into practice within particular political discourse.

The spatial and temporal ontological feature of political action is characterized by such a phenomenon as world globalization (which implies a territorial expansion of local political solutions) and time compression for problem-solving process. Categories of space and time are the key to any process of political decision making. In fact, when analyzing any action we have to take into account the territory or group where the decision will be distributed and how much time the decision making will take and what its implementations will be. Nowadays, the analysis of these two categories (space and time) is complicated by the multi-level relationships in the international community and swift information channels.

When we are talking about 'universality' in the context of problem-solving and decision-making processes we reveal a significant intertwining of local and global challenges. This defines the integral and fragile character of the world order. Global problems develop in complex and increase global interconnectedness and interdependence of regions, countries, nations, peoples, and individuals (see, *e.g.*, Grinin and Korotayev 2009).

One of the features of the political decision-making process is its potential consequences for the whole world. Of course, this is also related to economic integration, transfer and exchange of material goods.

Another characteristic within the framework of ontological analysis is the time component. Any political decision-making process unfolds in time. Almost in any theory, for example, in the theory of bounded rationality, the decision-making process is divided into stages. Those phases can be defined as follows: to identify the problem, to analyze it, to develop optimal solutions, to choose the best solutions, to make a decision and to implement it. All these steps are time-constrained. The decision effectiveness mostly depends on the speed of problem detection and on the ability to quickly implement the decision. And, of course, the information and information processing play here a significant role.

Epistemological characteristics of a political action consist in obtaining knowledge, accumulation, analysis and development of knowledge. In the global world this process is determined by the development of information technology, the increasing amounts of information, and, what is most important – by the ever more complicated procedure of distinguishing between false and true information.

In the twentieth century, there were debates on how the value system of the state or the moral, psychological, and subjective expression of the ruler's will could restrain the policy-making process. But today we face another challenge. We question the whole rationality because the data for the policy making can turn false. And to reveal the truth is almost impossible as far as criteria of truth have been blurred for a long time. Besides, it is practically impossible to check the information that is propagated by modern information channels. And what is most important, nobody is interested in truth.

False information being spread through the new media, either accidentally or deliberately, can generate pseudo-issues for which we will have to search pseudo-solutions. And this would mislead the whole system of government, destabilize, endanger, and compromise it. Of course, the media play the main role in this process, and thus, have fundamen-

tally changed the motivation for survival in the twenty-first century. Today the media do not inform people about current events in the country and in the world; they have actually become a marginal factory of sensations and 'hot news', when it becomes common to transmit information inaccurately, to take it out of context and, finally, to sacrifice the truth for the sake of catching headlines.

In the early 1970s, this trend has been brilliantly emphasized by Michel Foucault in his work devoted to Nietzsche's 'Will to Knowledge' (see, e.g., Eribon 1991). Foucault expressed his belief which in the future would become the theme and thesis of his main work *Surveiller et punir* [Discipline and Punish] (Foucault 1975). So Foucault underlined the mandatory falsification on which the true knowledge is based. Foucault points to the subjective base in the management and regulation of power. Decision is made not on the basis of pure truth, but on the basis of the corporeality, body, pleasure, and pain, limits and wishes of moral freedoms.

So, moving on to axiological and praxeological characteristics of political action, we note that the value (axiological) characteristics of the political decision are determined by the influence of subjective factors, behavioral assessment, decision development, and decision making. And here we also have to speak about the impact of globalization, in particular, about cultural globalization. National mentality, psychological contexts of the actions, human behavior and the way they influence the policy-making process became, perhaps, even more significant than a mere technology.

One should mention one of the most popular concepts in the theory of political decision making, namely, Harold Lasswell's behavioral model (see, e.g., Lasswell 2009). At the core of his model there is an idea of interpreting the decision-making process as human behavior regulated by mechanisms such as incentives and motivations, attitudes and reactions. According to this model, a macro-political process consists in the distribution of key values (resources) by means of governmental institutions. Lasswell's early work *Politics: Who Gets What, When, How* (Lasswell 1951) puts forward four basic questions for the analysis of political process.

Micro-level decision making is related to behavior of individuals who have personal motives, feelings, and emotions. Personal psychological characteristics have a strong influence on any decision of a person who is in power to take political decisions. Thus, in the mechanism of political decision-making we should take into account the psychological characteristics of an individual political leader.

Meso-level. Private motives and public interest are considered as binding for meso-policy. Within the political decision-making process, the politicians often sublimate their own feelings and release their personal egos, thus solving their personal problems. The decision-makers have to gradually shift the emphasis from their private motives to the public interest.

In general, this model attempts at connecting the role of public institutions, interests, and values with the assessment of psychological parameters of individual behavior like irrational motives, emotions, perceptions, and attitudes which are considered in this case the dominant factors of the policy management.

When analyzing the value aspect of political action one can hardly ignore the issues related to cultural globalization which has blurred the boundaries of national consciousness, and this, in turn, made it possible to unify political decisions and political language (see, e.g., Grinin and Korotayev 2010).

The praxeological characteristics of the political decision define it as a discursive practice. It encompasses the experience of writing laws, using the political decision language, and the creation of a modern law system as the formalization of political decision making in practice. This refers not to Political Science, but rather to Law. So everybody understands that the importance of a decision is determined by the degree of its formalization, by the fact who signed the document and how the control over its implementation is performed. Power and language are inextricably linked not only because power is exercised through the language itself (laws, orders, *etc.*), but also because it organizes the language itself. And in the process of globalization and improvement of the global law the language of political decision becomes unified.

In summary, we have an interconnected system of holistic formation of political decision and political action. Using the methods of systemic philosophy and with the account of the characteristics of globalization, we have focused our attention on the fundamental categories constituting the phenomenon of political decision (political action). In fact, we do not use such categories as state, society, sovereign, decision-maker, political cycle and so on; instead, we deal with other categories, actually, with the global categories like space, time, knowledge, information, value, language, and discourse. We go beyond those conceptual models that form the basis of the political decision-making theory. The shift in focus from technology to the internal nature of politics and political action does not mean diminishing their practical relevance. On the contrary, the philosophical categories help us to grasp those unchanged and permanent characteristics of the process and the nature of political action in the context of the world order. Playing with political strategies we forget about the nature of politics itself, its constants, about its existence in space and time, about the dangers of falsification and the attempts to approach the truth. We have to take into account the global information flow, the system of values, and human mental nature, the language as a means of transferring and analyzing information and of expressing deep feelings.

References

- Eribon, D. 1991.** *Michel Foucault*. Cambridge, MA: Harvard University Press.
- Foucault, M. 1975.** *Surveiller et punir*. Paris: Gallimard.
- Grinin, L. E., and Korotayev, A. V. 2009.** Social Macroeolution: Growth of the World System Integrity and a System of Phase Transitions. *World Futures* 65(7): 477–506.
- Grinin, L. E., and Korotayev, A. V. 2010.** Will the Global Crisis Lead to Global Transformations? The Coming Epoch of New Coalitions. *Journal of Globalization Studies* 1(2): 166–183.
- Lasswell, H. D. 1951.** *Politics: Who Gets What, When, How*. Cleveland, OH: Meridian Books.
- Lasswell, H. D. 2009.** *Power and Personality*. New Brunswick, NJ: Transaction Publishers.
- McLuhan, E. 1996.** The Source of the Term, ‘Global Village’ *McLuhan Studies* 1(2). URL: http://projects.chass.utoronto.ca/mcluhan-studies/v1_iss2/1_2art2.htm.

Kondratieff Waves in the Global Studies Perspective*

Andrey V. Korotayev and Leonid E. Grinin

The analysis of long economic cycles allows us to understand long-term world-system dynamics, to develop forecasts, to explain crises of the past, as well as the current global economic crisis. The article offers a historical sketch of research on K-waves; it analyzes the nature of Kondratieff waves that are considered as a special form of cyclical dynamics that emerged in the industrial period of the World System history. It offers a historical and theoretical analysis of K-wave dynamics in the World System framework; in particular, it studies the influence of the long wave dynamics on the changes of the world GDP growth rates during the last two centuries. Special attention is paid to the interaction between Kondratieff waves and Juglar cycles. The article is based on substantial statistical data, it extensively employs quantitative analysis, contains numerous tables and diagrams. On the basis of the proposed analysis it offers some forecasts of the world economic development in the next two decades.

The article concludes with a section that presents a hypothesis that the change of K-wave upswing and downswing phases correlates significantly with the phases of fluctuations in the relationships between the World-System Core and Periphery, as well as with the World System Core changes.

Keywords: cyclical dynamics, Juglar cycles, Kondratieff waves, K-waves, World System, long waves, phases of long waves, world economy, Nikolay Kondratieff, world GDP, technological innovation, core and periphery, leading sector, technological system, technological style.

Qualitative movement toward new unknown forms and levels cannot proceed infinitely, linearly and unhindered. There are always certain limitations; such movement is accompanied by the emergence of disproportions, growth of competition for resources, and so on. On the other hand, continuous human effort to overcome environmental resistance to such movement has created conditions for the continuous emergence of more and more complex and effective structures at the level of both individual societies and the World System as a whole. However, relatively short periods of fast development alternated with periods of stagnation, crisis, and sometimes even collapse. This was one of the main causes that led to the formation of cyclical components of social macrodynamics that in pre-industrial epoch could include cycles with many different periods, including secular and even millennial ones (e.g., Korotayev, Malkov, and Khaltourina 2006; Korotayev and Khaltourina 2006; Turchin 2003, 2005a, 2005b; Nefedov 2004; Turchin and

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Nefedov 2009; Turchin and Korotayev 2006; Korotayev *et al.* 2010; Grinin and Korotayev 2012).

In the industrial period we see the emergence of new cyclical components including Juglar cycles¹ with a characteristic period between 7 and 11 years that manifest themselves in energetic booms and crises that suddenly engulf social systems. Note that those cycles are intrinsic components of the developmental dynamics of such societies. However, they are not the only cycles that are characteristic for the industrial and postindustrial systems, whereas one of the most interesting aspects of their cyclical dynamics is represented by cycles with a characteristic period of 40 to 60 years known as Kondratieff waves (or just K-waves).

The analysis of long economic cycles allows analysts to comprehend the long-term dynamics of the World System development, and helps to develop forecasts; it also facilitates our understanding of the crises of the past, as well as the current global economic crisis. In the present article we will analyze the emergence of K-waves in the World System economic dynamics in the nineteenth century and the changes that can be traced in K-wave patterns in the twentieth century, but especially after the Second World War. We will also analyze the peculiarities of the study of K-waves within the World System scale and will demonstrate that an adequate understanding of the nature of the modern K-wave dynamics can only be achieved if this phenomenon is studied precisely within this framework.

Long Waves in the World Economic Dynamics

In the 1920s, the Russian economist Nikolay Kondratieff observed that the historical record of some economic indicators then available to him appeared to indicate a cyclic regularity of phases of gradual increases in values of respective indicators followed by phases of decline (Kondratieff 1922: ch. 5; 1925, 1926, 1935, 2002); the period of these apparent oscillations seemed to him to be around 50 years. He found this pattern with respect to such indicators as prices, interest rates, foreign trade, coal and pig iron production (as well as some other production indicators) for some major Western economies (first of all England, France, and the United States), whereas the long waves in pig iron and coal production were claimed to be detected since the 1870s for the world level as well (note that as regards the production indices during decline/downswing phases we deal with the slowdown of production growth rather than with actual production decline that rarely lasts longer than a year or two, whereas during the upswing phase we deal with a general acceleration of the production growth in comparison with the preceding downswing/slowdown period [see, *e.g.*, Modelski 2001, 2006 who prefers quite logically to designate 'decline/downswing' phases as 'phases of take-off', whereas he designates the upswing phases as 'high growth phases']).

Among important Kondratieff predecessors one should mention J. van Gelderen (1913), M. A. Bunyatyan (1915), and S. de Wolff (1924). One can also mention William Henry Beveridge (better known, perhaps, as Lord Beveridge, the author of the so-called *Beveridge Report on Social Insurance and Allied Services* (1942) that served as the basis for the British Welfare State, especially the National Health Service, after the Second World War), who discovered a number of cycles in the long-term dynamics of wheat prices, whereas one of those cycles turned to have an average periodicity of 54 years (Beve-

¹ In addition to short-term Kitchin cycles and medium-term Kuznets swings (see, *e.g.*, Kitchin 1923; Kuznets 1930, 1958; Abramovitz 1961; Korotayev and Tsirel 2010c).

ridge 1921, 1922). Note that Kondratieff at the time of his discovery of long waves was unaware of the results of the above mentioned scientists (see, *e.g.*, Kondratieff 1935: 115, note 1).

Kondratieff himself identified the following long waves and their phases (see Table 1).

Table 1. Long waves and their phases as identified by Kondratieff

<i>Long wave number</i>	<i>Long wave phase</i>	<i>Dates of the beginning</i>	<i>Dates of the end</i>
<i>First</i>	A: upswing	The end of the 1780s or beginning of the 1790s	1810–1817
	B: downswing	1810–1817	1844–1851
<i>Second</i>	A: upswing	1844–1851	1870–1875
	B: downswing	1870–1875	1890–1896
<i>Third</i>	A: upswing	1890–1896	1914–1920
	B: downswing	1914–1920	

The subsequent students of Kondratieff cycles identified additionally the following long-waves in the post-World War 1 period (see Table 2).

Table 2. 'Post-Kondratieff' long waves and their phases

<i>Long wave number</i>	<i>Long wave phase</i>	<i>Dates of the beginning</i>	<i>Dates of the end</i>
<i>Third</i>	A: upswing	1890–1896	1914–1920
	B: downswing	From 1914 to 1928/29	1939–1950
<i>Fourth</i>	A: upswing	1939–1950	1968–1977
	B: downswing	1968–1974	1984–1991
<i>Fifth</i>	A: upswing	1984–1991	2008–2010?
	B: downswing	2008–2010?	?

Sources: Mandel 1980; Dickson 1983; Van Duijn 1983: 155; Wallerstein 1984; Goldstein 1988: 67; Modelski and Thompson 1996; Bobrovnikov 2004: 47; Pantin and Lapkin 2006: 283–285, 315; Ayres 2006; Linstone 2006: fig. 1; Tausch 2006b: 101–104; Thompson 2007: table 5; Jourdon 2008: 1040–1043. The last date is suggested by the authors of the present paper. It was also suggested earlier by Lynch 2004; see also Akaev and Sadovnichy 2010; Akaev *et al.* 2011.

A considerable number of explanations for the observed Kondratieff wave (or just K-wave [Modelski and Thompson 1996; Modelski 2001]) patterns have been proposed. At the initial stage of K-wave research, the respective pattern was detected in the most secure way in terms of the price indices (see below). Most explanations proposed during that period were monetary, or monetary-oriented. For example, K-waves were connected with the inflation shocks caused by major wars (*e.g.*, Åkerman 1932; Bernstein 1940; Silberling 1943, *etc.*). In recent decades such explanations became less popular, as the K-wave pattern stopped being traced in the price indices after the Second World War (*e.g.*, Goldstein 1988: 75; Bobrovnikov 2004: 54).

Kondratieff himself accounted for the K-wave dynamics first of all on the basis of capital investment dynamics (see Kondratieff 1928, 1984; 2002: 387–397). This trend was further developed by Jay W. Forrester and his colleagues (see, *e.g.*, Forrester 1978, 1981,

1985; Senge 1982, *etc.*), as well as by A. van der Zwan (1980), Hans Glisman, Horst Rodemer, and Frank Wolter (1983), *etc.*

However, in the recent decades the most popular explanation of K-wave dynamics was the one connecting them with the waves of technological innovations.

Kondratieff himself noticed that ‘during the recession of the long waves an especially large number of important discoveries and inventions in production and communication technologies are made, which, however, are usually applied on a large scale only at the beginning of the next long upswing’ (Kondratieff 1935: 111, see also, *e.g.*, *Idem* 2002: 370–374).

Schumpeter (1939) used this argument to develop a rather influential ‘cluster-of-innovation’ version of K-waves theory, according to which, Kondratieff cycles were predicted primarily due to discontinuous rates of innovation (for more recent developments of the Schumpeterian version of K-wave theory see, *e.g.*, Mensch 1979; Dickson 1983; Freeman 1987; Berry 1991; Tylecote 1992; Glazyev 1993; Maevski 1997; Modelski and Thompson 1996; Modelski 2001, 2006; Devezas and Modelski 2003; Yakovets 2001; Ayres 2006; Dator 2006; Hirooka 2006; Papenhausen 2008; Perez 2011; for the most recent presentation of empirical evidence supporting Schumpeter’s cluster-of-innovation hypothesis see Kleinknecht and van der Panne 2006). Within this approach every Kondratieff wave is associated with a certain leading sector (or leading sectors), technological system or technological style. For example, the third Kondratieff wave is sometimes characterized as ‘the age of steel, electricity, and heavy engineering. The fourth wave takes in the age of oil, the automobile and mass production. Finally, the current fifth wave is described as the age of information and telecommunications (Papenhausen 2008: 789); whereas the forthcoming sixth wave is sometimes supposed to be connected first of all with nano- and biotechnologies (*e.g.*, Lynch 2004; Dator 2006).

There were also a number of attempts to combine capital investment and innovation theories of K-waves (*e.g.*, Rostow 1975, 1978; van Duijn 1979, 1981, 1983; Akaev 2010, *etc.*). Of special interest is Devezas – Corredine model based on biological determinants (generations and learning rate) and information theory that explains (for the first time) the characteristic period (50–60 years) of Kondratieff cycles (Devezas and Corredine 2001, 2002; see also Devezas, Linstone, and Santos 2005).

Many social scientists consider Kondratieff waves as a very important component of the modern world-system dynamics. As has been phrased by one of the most important K-wave students:

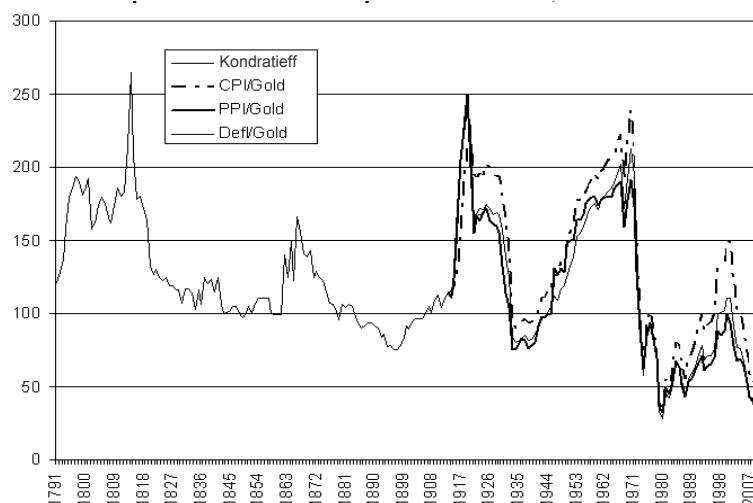
Long waves of economic growth possess a very strong claim to major significance in the social processes of the world system... Long waves of technological change, roughly 40–60 years in duration, help shape many important processes... They have become increasingly influential over the past thousand years. K-waves have become especially critical to an understanding of economic growth, wars, and systemic leadership... But they also appear to be important to other processes such as domestic political change, culture, and generational change. This list may not exhaust the significance of Kondratieff waves but it should help establish an argument for the importance of long waves to the world’s set of social processes (Thompson 2007).

Against this background it appears rather significant that evidence of the very presence of the Kondratieff waves in the world dynamics remains rather controversial. The presence of K-waves in price dynamics (at least before the Second World War) has a rather wide empirical support (see, *e.g.*, Gordon 1978: 24; van Ewijk 1982; Cleary and Hobbs 1983,

etc.). However, as has been mentioned above, the K-wave pattern stopped being traced in the price indices after the Second World War (*e.g.*, Goldstein 1988: 75; Bobrovnikov 2004: 54).

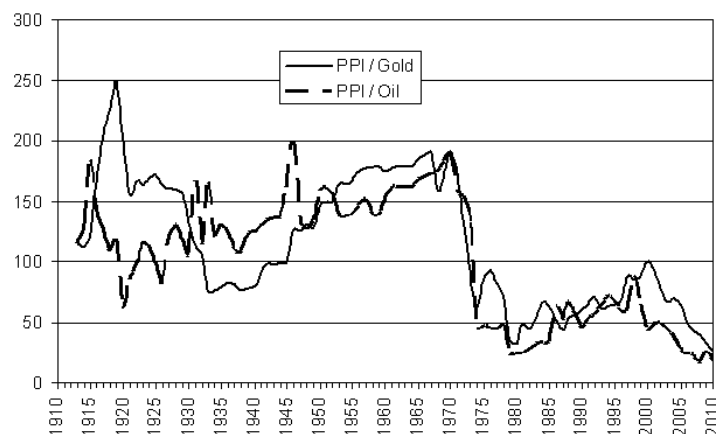
On the other hand, as has already been demonstrated (Scheglov 2009; Grinin, Korotayev, and Tsirel 2011: 75–77), when inflation is taken into account and the price indices are expressed in grams of gold rather than in dollars, those indices continue to correlate with the K-wave pattern (see Fig. 1). Starting from the early 1970s, energy resources (oil in the first place) served as a sort of ‘reserve currency’ comparable with gold, and Kondratieff waves started to be traced in the price index dynamics when expressed in oil equivalent (see Fig. 2).

Fig. 1. The USA producer price index used by Kondratieff and extended up to 2010 in the gold equivalent (100 = 1900–10 level)



Sources: Scheglov 2009; Grinin, Korotayev, and Tsirel 2011: 76.

Fig. 2. The USA producer price index in gold and oil equivalent (100 = 1900–10 level)



Sources: BP 2010; Scheglov 2009; Grinin, Korotayev, and Tsirel 2011: 77.

Regarding long waves in production dynamics we will restrict ourselves to analyzing evidence for the presence of K-waves in the world production indices. As Kondratieff waves tend to be considered an important component of the world-system social and economic dynamics, one would expect to detect them in terms of the major world macroeconomic indicators; first of all with respect to the world GDP dynamics (Chase-Dunn and Grimes 1995: 405–411). However, until now the attempts to detect them in the dynamics of the world GDP (or similar indicators) have brought controversial results.

Kondratieff himself claimed to have detected long waves in the dynamics of world production of coal and pig iron (*e.g.*, Kondratieff 1935: 109–110). However, his evidence of the presence of long waves in these series (as well as in all the production dynamics series on national levels) was criticized most sharply:

Foremost among the methodological criticisms have been those directed against Kondratieff's use of trend curves. Kondratieff's method is first to fit a long-term trend to a series and then to use moving averages to bring out long waves in the residuals (the fluctuations around the trend curve).

But 'when he eliminated the trend, Kondratieff failed to formulate clearly what the trend stands for' (Garvy 1943: 209). The equations Kondratieff uses for these long-term trend curves... include rather elaborate (often cubic) functions.² This casts doubt on the theoretical meaning and parsimony of the resulting long waves, which cannot be seen as simple variations in production growth rates (Goldstein 1988: 82; see also, *e.g.*, Barr 1979: 704; Eklund 1980: 398–399, *etc.*).

However, quite a few scientists presented later new evidence supporting the presence of long waves in the dynamics of the world economic indicators. For example, Mandel (1975: 141; 1980: 3) demonstrated that, in full accordance with Kondratieff's theory, between 1820 and 1967 during Phases A of K-cycles the annual compound growth rates in world trade were on average significantly higher than in adjacent Phases B. David M. Gordon (1978: 24) got similar results with respect to world *per capita* production for 1865–1938 based on world production data from Dupriez (1947: 567), world industrial dynamics (for 1830–1980) taken from Thomas Kuczynski (1982: 28), and average growth rates of the world economy (Kuczynski 1978: 86) for 1850–1977; similar results were obtained by Joshua Goldstein (1988: 211–217).

Of special interest are the works by Marchetti and his co-workers at the International Institute for Advanced System Analysis who have shown extensively the evidence of K-waves using physical indicators, as for instance energy consumption, transportation systems dynamics, *etc.* (Marchetti 1980, 1986, 1988, *etc.*). Arno Tausch claims to have detected K-waves in the world industrial production growth rates dynamics using polynomial regression methods (Tausch 2006a: 167–190). However, empirical tests produced by a few other scholars failed to support the hypothesis of presence of the K-waves in the world production dynamics (see, *e.g.*, van der Zwan 1980: 192–197; Chase-Dunn and Grimes 1995: 407–409, reporting the results of Peter Grimes' research).

There were a few attempts to apply spectral analysis in order to detect the presence of K-waves in the world production dynamics. Thomas Kuczynski (1978) applied spectral analysis in order to detect K-waves in world agricultural production, total exports, inventions, innovations, industrial production, and total production for the period between 1850

² For example, for the trend of English lead production the function used by Kondratieff looks as follows: $y = 10^{(0.0278 - 0.0166x - 0.00012x^2)}$.

and 1976. Though Kuczynski suggests that his results ‘seem to corroborate’ the K-wave hypothesis, he himself does not find this support decisive and admits that ‘we cannot exclude the possibility that the 60-year-cycle... is a random cycle’ (Kuczynski 1978: 81–82); note that Kuczynski did not make any formal test of statistic significance of the K-waves tentatively identified by his spectral analysis. K-waves were also claimed to have been found with spectral analysis by Rainer Metz (1992) both in GDP production series on eight European countries (for the 1850–1979 period) and in the world production index developed by Hans Bieshaar and Alfred Kleinknecht (1984) for 1780–1979; however, later he denounced those findings (Metz 1998, 2006).

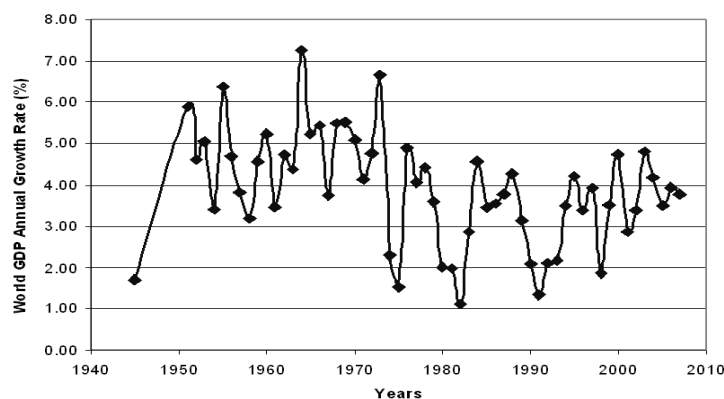
A few scientists using spectral analysis have failed to detect K-waves in production series on national levels of quite a few countries (*e.g.*, van Ewijk 1982; Metz 1998, 2006; Diebolt and Doliger 2006).

Against this background we (together with Sergey Tsirel) have found it appropriate to check the presence of K-waves in the world GDP dynamics using the most recent datasets on this variable dynamics covering the period between 1870 and 2007 (Maddison 1995, 2001, 2003, 2009; World Bank 2012) and applying an upgraded methodology for the estimation of statistical significance of detected waves (see, *e.g.*, Korotayev and Tsirel 2010a, 2010b, 2010c; Grinin, Korotayev, and Tsirel 2011); it is worth emphasizing that our analysis made it possible for the first time to estimate statistical significance of the Kondratieff waves in the world GDP dynamics, as will be demonstrated in the following sections.

Kondratieff Waves in the Post-Second World War GDP Data

Note that the Kondratieff-wave component can be seen quite clearly in the post-World War II dynamics of the world GDP growth rates even directly, without application of any special statistical techniques (see Fig. 3).³

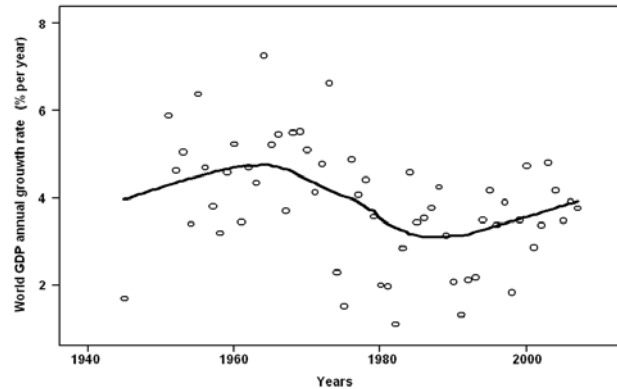
Fig. 3. Dynamics of the annual world GDP growth rates (%), 1945–2007; 1945 point corresponds to the average annual growth rate in the 1940s. Initial series: Maddison/World Bank empirical estimates



³ Note that K-waves (as well as Juglar cycles) are also quite visible for recent decades in the world dynamics of such important macroeconomic variables as the world gross fixed capital formation (as % of GDP) and the investment effectiveness (it indicates how many dollars of the world GDP growth is achieved with one dollar investments) – see Appendix, Figs S1 and S2. The dynamics of both variables are connected to the world GDP dynamics. Actually, the world GDP dynamics is determined to a considerable extent by the dynamics of those two variables.

However, the Kondratieff wave component becomes especially visible if a LOWESS (= *LOcally WEighted Scatterplot Smoothing*) line is fitted (see Fig. 4).

Fig. 4. Maddison/World Bank empirical estimates with fitted LOWESS line. Kernel: Triweight. % of points to fit: 50



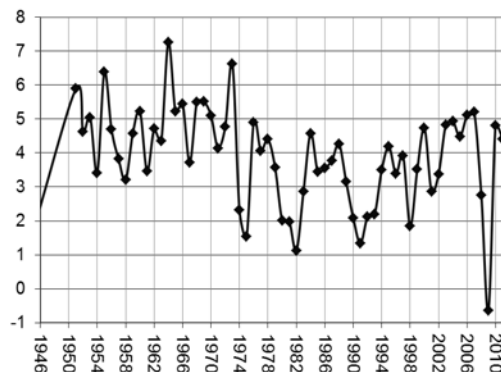
As can be seen, Figs 3–4 indicate:

1) that the Kondratieff-wave pattern can be detected up to the present in a surprisingly intact form (though, possibly, with a certain shortening of its period, suggested by a few authors [see, *e.g.*, van der Zwan 1980; Bobrovnikov 2004; Tausch 2006a; Pantin and Lapkin 2006]);

2) that the present world financial-economic crisis might really mark the beginning of a new Kondratieff Phase B (downswing). Indeed, consider the post-World War II dynamics of the world GDP growth rates taking into account the two years, 2008 and 2009 (using the World Bank forecast figure for the year 2012) (see Fig. 5).

As we see, according to its magnitude the current financial-economic crisis does not appear to resemble a usual crisis marking the end of a Juglar cycle amidst an upswing phase (or a downswing) of a Kondratieff cycle (which one would expect with the second interpretation). Instead it resembles particularly deep crises (similar to the ones of 1973–1974, 1929–1933, mid-1870s or mid-1820s) that are found just at the border of Phases A and B of the K-waves (see, *e.g.*, Grinin and Korotayev 2010).

Fig. 5. Dynamics of the Annual world GDP Growth Rates (%), 1945–2011

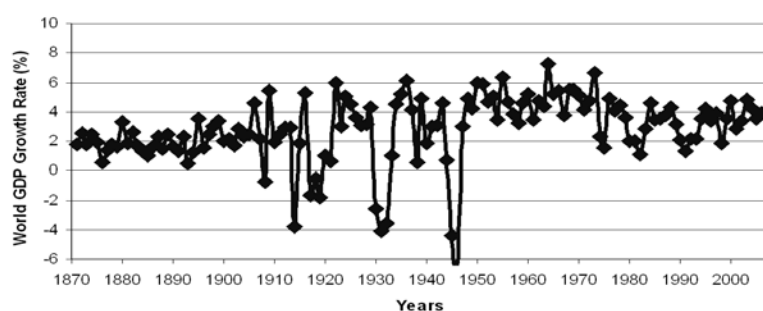


Sources: World Bank 2011: NY.GDP.MKTP.PP.KD; Maddison 2010; Conference Board 2011.

Kondratieff Waves in the World GDP Data before 1945–1950

As Fig. 6 shows, for the 1870–1945/50 period the K-wave pattern is not as easily detectable as after 1945/50. The turbulent second, third and fourth decades of the twentieth century are characterized by enormous magnitude of fluctuations of the world GDP growth rates (not observed either in previous or subsequent periods). The lowest (for 1871–2007) figures of the world GDP annual rates of change are observed just in these decades (during the Great Depression, World Wars I and II as well as immediately after the end of those wars). On the other hand, during the mid-20s and mid-30s booms the world GDP annual growth rates achieved historical maximums (they were only exceeded during the K-wave 4, Phase A, in the 1950s and 1960s, and were generally higher than during both the pre-World War I and recent [1990s and 2000s] upswings). This, of course, complicates the detection of the long-wave pattern during those decades.

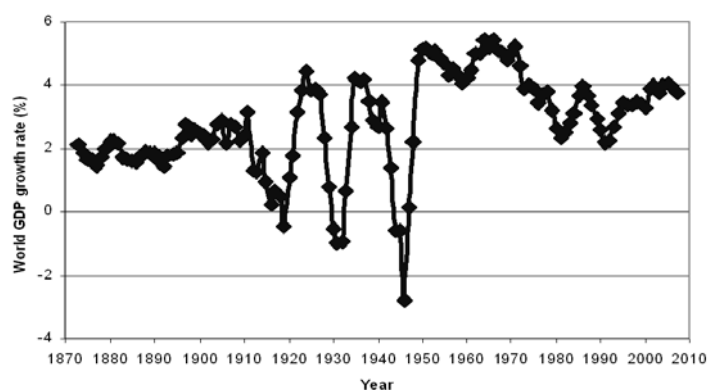
Fig. 6. Dynamics of the World GDP Annual Growth Rates (%), 1871–2007



Source: Korotayev and Tsirel 2010c: 6.

Actually, this pattern is somehow better visible in the diagrams for 5-year moving average, and, especially, for simple 5-year averages (see Figs 7 and 8).

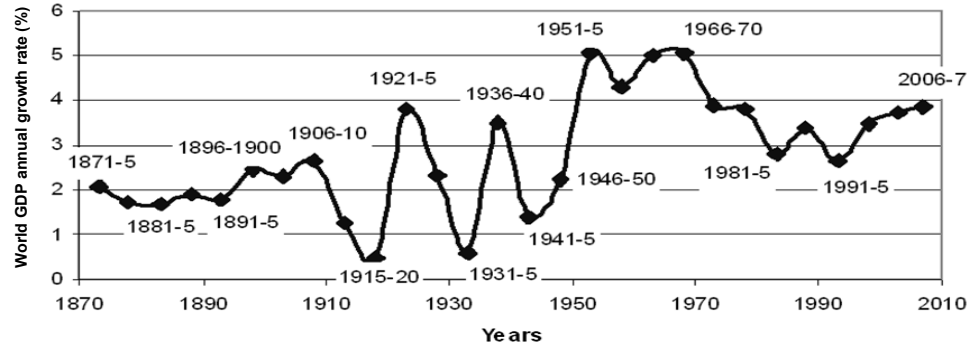
Fig. 7. Dynamics of the world GDP annual growth rates (%), moving 5-year averages, 1871–2007



Sources: World Bank 2012; Maddison 2009.

Note: 1873 point corresponds to the average annual growth rate in 1871–1875, 1874 to 1872–1876, 1875 to 1873–1877... 2005 to 2003–2007; 2006 and 2007 points correspond to the annual growth rates in years 2006 and 2007 respectively.

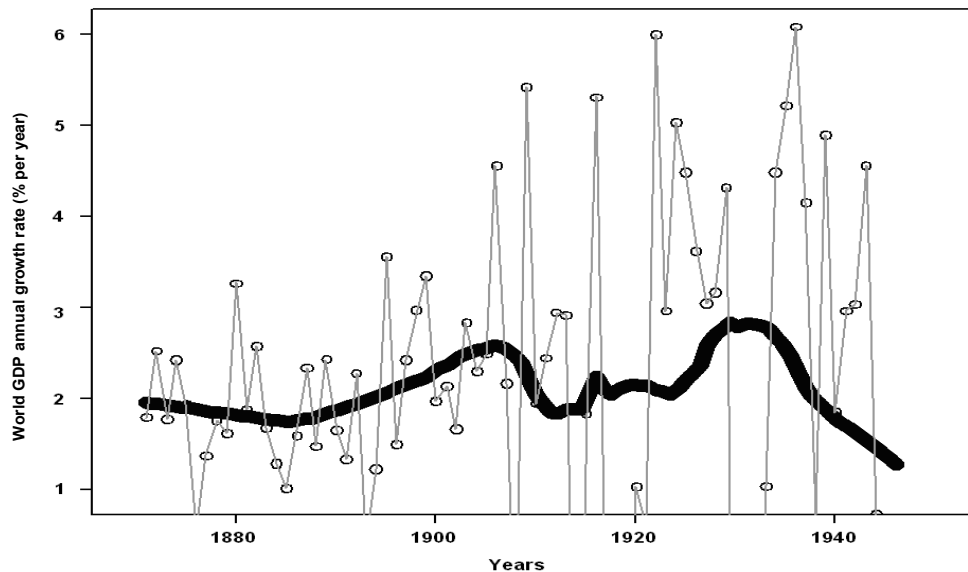
Fig. 8. Dynamics of the world GDP annual growth rates (%), 5-year averages, 1871–2007



Sources: World Bank 2012; Maddison 2009.

The application of the LOWESS technique reveals a certain K-wave pattern in the pre-1950 series (see Fig. 9).

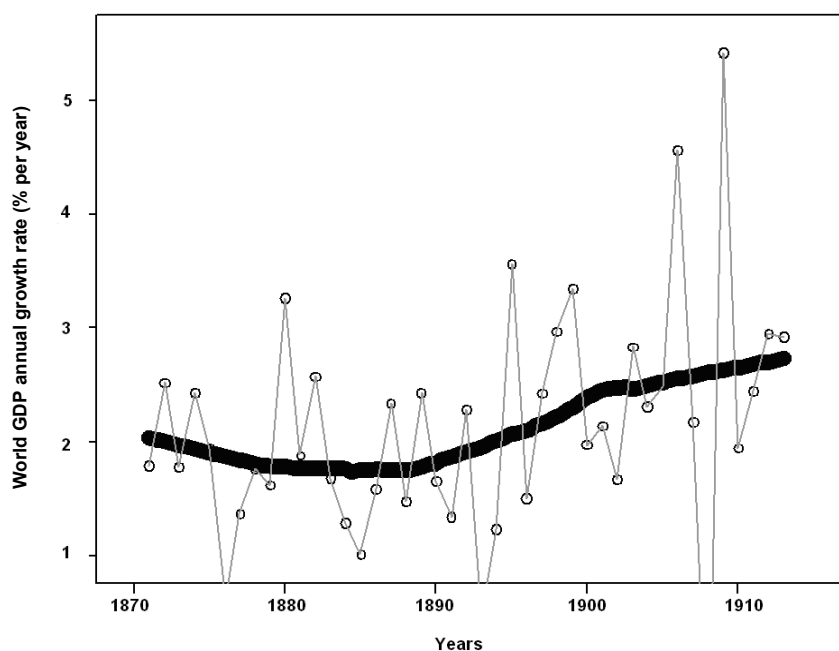
Fig. 9. World GDP annual growth rate dynamics (1870–1946): Maddison empirical estimates with fitted LOWESS line



Note: Maddison-based empirical estimates with fitted LOWESS line. Kernel: Triweight. % of points to fit: 40.

In fact, the LOWESS technique reveals quite clearly the K-wave pattern prior to World War I (in the period corresponding to Phase B of the 2nd Kondratieff wave and major part of Phase A of the 3rd wave) (see Fig. 10).

Fig. 10. World GDP annual growth rate dynamics: Maddison-based empirical estimates with fitted LOWESS line. Phase B (Downswing) of the 2nd Kondratieff Wave and Phase A (Upswing) of the 3rd Wave, 1871–1913

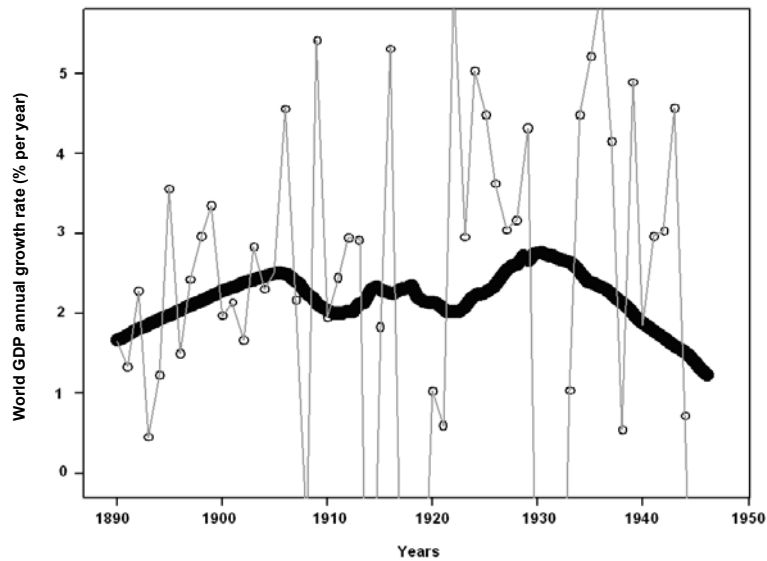


Note: Maddison-based empirical estimates with fitted LOWESS line. Kernel: Triweight. % of points to fit: 50.

However, the 3rd K-wave (apparently strongly deformed by World War I) looks much less accurate (see Fig. 11).

Phase B of the 3rd Kondratieff cycle presents the main problem as the timing of its start remains unclear (1914, or mid-1920s?). Our analysis does not make it possible to make the final choice between two options – either K3 Phase B started in 1914 and was interrupted by the mid-1920s boom; or K3 Phase A continued till the mid-1920s having been interrupted by the WWI bust.

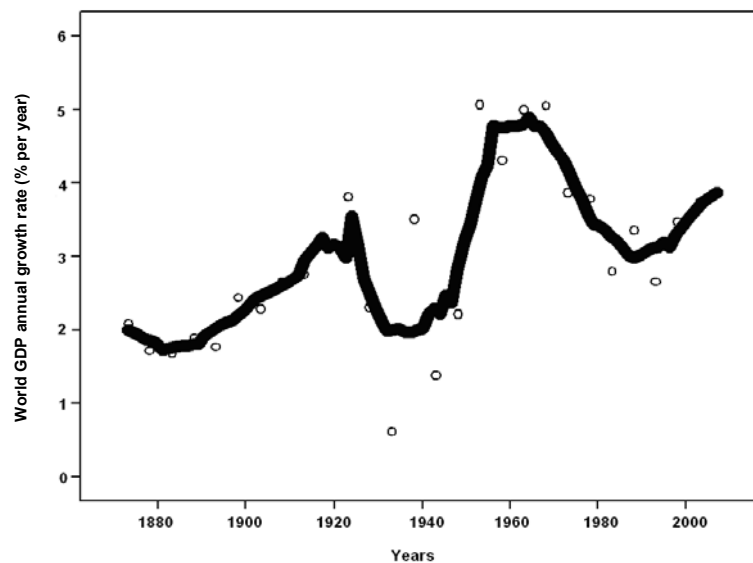
Fig. 11. World GDP annual growth rate dynamics: Maddison-based empirical estimates with fitted LOWESS line. *The 3rd Kondratieff Wave*



Note: Maddison-based empirical estimates with fitted LOWESS line. Kernel: Triweight. % of points to fit: 60.

However, the LOWESS technique produces an especially neat K-wave pattern with the second assumption – that is we get it when we omit the WWI influence (see Fig. 12).

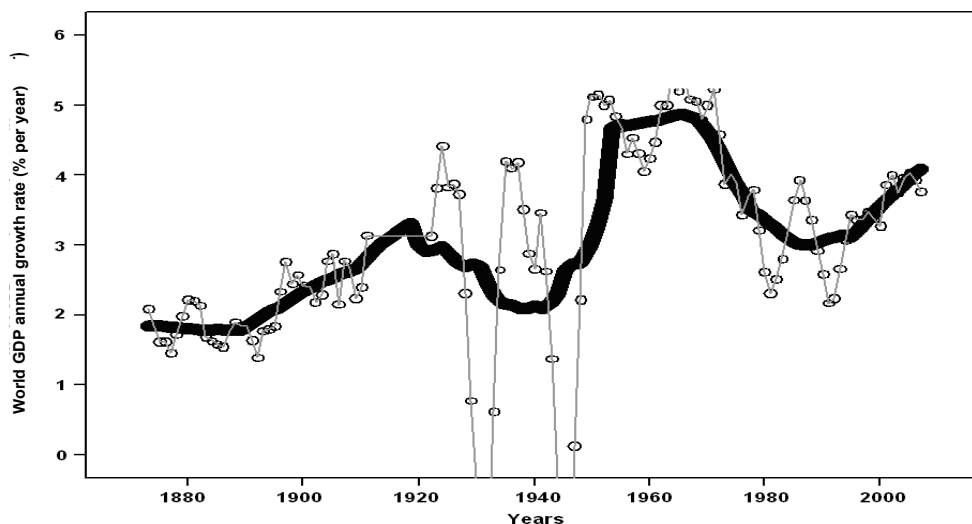
Fig. 12. World GDP annual growth rate dynamics, 5-year averages: Maddison-based empirical estimates with fitted LOWESS line. 1870–2007, omitting World War I influence



Note: Maddison-based empirical estimates with fitted LOWESS line. Kernel: Triweight. % of points to fit: 20.

This figure reveals rather distinctly double peaks of the upswings. With a stronger smoothing (see Fig. 13) the form of the peaks becomes smoother, whereas the waves themselves become more distinct.

Fig. 13. World GDP annual growth rate dynamics, 5-year moving average: Maddison-based empirical estimates with fitted LOWESS line. 1870–2007, omitting World War I influence



Note: Maddison-based empirical estimates with fitted LOWESS line. Kernel: Triweight. % of points to fit: 20.

Hence, it looks a bit more likely that K3 Phase A lasted till the mid-1920s (having been interrupted by WWI). Incidentally, if we take the WWI influence years (1914–1921) out, we arrive at a quite reasonable K3 Phase A length – 26 years, even if we take 1929 as the end of this phase:

$$1929 - 1895 = 34$$

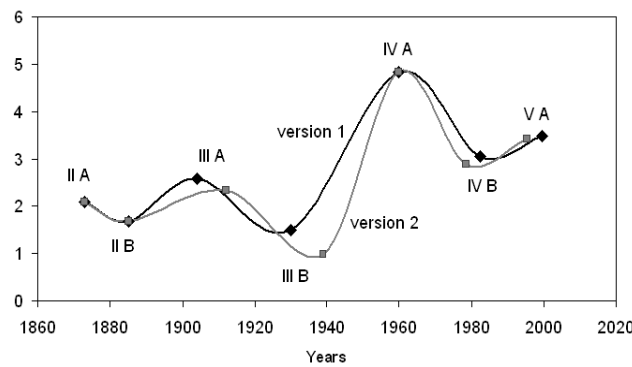
$$34 - 8 = 26$$

Note that with the first assumption (K3 Phase B started in 1914 and was interrupted by the mid-1920s boom) we would have an excessive length of K3 Phase B – 32 years (that would, however, become quite normal, if we take out the mid-1920s boom years).

Yet, it seems necessary to stress that we find overall additional support for the Kondratieff pattern in the world GDP dynamics data for the 1870–1950 period. First of all, this is manifested by the fact that both Phases A of this period have relatively higher rates of world GDP growth, whereas both Phases B are characterized by relatively lower rates. Note that this holds true without taking out either the World War I, or the 1920s boom influence, and irrespective of whatever dating for the beginnings and ends of the relevant phases we choose (see Table 3 and Fig. 14).

Table 3. Average annual world GDP growth rates (%) during phases A and B of Kondratieff waves, 1871–2007

<i>Kondratieff wave number</i>	<i>Phase</i>	<i>Years</i>		<i>Average annual World GDP growth rates (%) during respective phase</i>	
		<i>Version 1</i>	<i>Version 2</i>	<i>Version 1</i>	<i>Version 2</i>
II	End of Phase A	1871–1875	1871–1875	2.09	2.09
II	B	1876–1894	1876–1894	1.68	1.68
III	A	1895–1913	1895–1929	2.57	2.34
III	B	1914–1946	1930–1946	1.50	0.98
IV	A	1947–1973	1947–1973	4.84	4.84
IV	B	1974–1991	1974–1983	3.05	2.88
V	A	1992–2007	1984–2007	3.49	3.42

Fig. 14. Average annual world GDP growth rates (%) during phases A and B of Kondratieff waves, 1871–2007

With different dates for beginnings and ends of various phases we have somehow different shapes of long waves, but the overall Kondratieff wave pattern remains intact. Note that the difference between the two versions can be partly regarded as a continuation of controversy between two approaches ('the K-wave period is approximately constant in the last centuries' vs. 'the period of K-waves becomes shorter and shorter').⁴ The first approach correlates better with the results of the spectral analysis that have been presented above and the optimistic forecast, whereas the second approach correlates better with the interpretation of the current crisis with the beginning of the downswing phase of the 5th K-wave.

Kondratieff Waves in the World GDP Dynamics before 1870

There are some grounds to doubt that Kondratieff waves can be traced back in the world GDP dynamics for the pre-1870 period (though for this period they appear to be detected for the GDP dynamics of the West).

Note that for the period between 1700 and 1870, Maddison provides world GDP estimate for one year only – for 1820. What is more, for the period before 1870, Maddison does not provide annual (or even per decade) estimates for many major economies, which

⁴ See, e.g., van der Zwan 1980; Bobrovnikov 2004; Tausch 2006a; Pantin and Lapkin 2006.

makes it virtually impossible to reconstruct the world GDP annual (or even per decade) growth rates for this period. However, it appears possible to reconstruct the world GDP estimate for 1850, as for this year Maddison does provide his estimates for all the major economies. Thus, it appears possible to estimate the world GDP average annual growth rates for 1820–1850 (*i.e.*, the period that more or less coincides with K1 Phase B) and for 1850–1870/1875 (*i.e.*, K2 Phase A), and, consequently, to make a preliminary test whether the Kondratieff wave pattern can be observed for the 1820–1870 period.

The results look as follows:

Table 4. Average annual world GDP growth rates (%) during phases A and B of Kondratieff waves, 1820–1894

<i>Kondratieff wave number</i>	<i>Phase</i>	<i>Years</i>		<i>Average annual world GDP growth rates (%) during respective phase</i>		<i>Average annual World GDP growth rate predicted by Kondratieff wave pattern</i>	<i>Observed</i>
		<i>Version 1</i>	<i>Version 2</i>	<i>Version 1</i>	<i>Version 2</i>		
I	B	1820–1850	1820–1850	0.88	0.88		
II	A	1851–1875	1851–1870	1.26	1.05	To be significantly higher than during the subsequent phase	Significantly lower than during the subsequent phase
II	B	1876–1894	1871–1894	1.68	1.76	To be significantly lower than during the subsequent phase	Significantly higher than during the subsequent phase

Thus, whatever dating of the end of K2 Phase A we choose, we observe a rather strong deviation from the K-wave pattern. Indeed, according to this pattern, one would expect that in the 1850–1870/5 period (corresponding to Phase A of the 2nd Kondratieff wave) the World GDP average annual growth rate should be higher than in the subsequent period (corresponding to Phase B of this K-wave). However, the actual situation turns out to be quite opposite – in 1870/75–1894 the world GDP average annual growth rate was significantly higher than in 1850–1870/75.

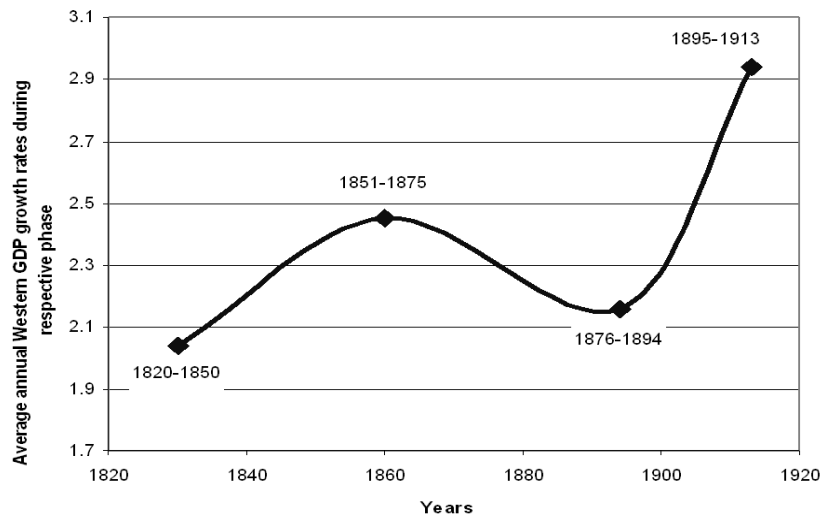
Note, however, that the K-wave pattern still seems to be observed for this period with respect to the GDP dynamics of the West (see Table 5 and Fig. 15).⁵

⁵ What is more, this pattern appears to be observed in the socio-economic dynamics of the European-centered world-system for a few centuries prior to 1820 (see, *e.g.*, Beveridge 1921, 1922; Goldstein 1988; Jourdon 2008; Modelski 2006; Modelski and Thompson 1996; Pantin and Lapkin 2006; Thompson 2007).

Table 5. Average annual world GDP growth rates (%) of the West during phases A and B of Kondratieff waves, 1820–1894

<i>Kondratieff wave number</i>	<i>Phase</i>	<i>Years</i>	<i>Average annual world GDP growth rates (%) during respective phase</i>	<i>Average annual world GDP growth rate predicted by Kondratieff wave pattern</i>	<i>Observed</i>
I	B	1820–1850	2.04	To be significantly lower than during the subsequent phase	Significantly lower than during the subsequent phase
II	A	1851–1875	2.45	To be significantly higher than during the subsequent phase	Significantly higher than during the subsequent phase
II	B	1876–1894	2.16	To be significantly lower than during the subsequent phase	Significantly lower than during the subsequent phase
III	A	1895–1913	2.94	To be significantly higher than during the previous phase	Significantly higher than during the previous phase

Note: Data are for 12 major West European countries (Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom) and four ‘Western offshoots’ (the United States, Canada, Australia, and New Zealand).

Fig. 15. Average annual world GDP growth rates (%) of the West during phases A and B of Kondratieff waves, 1820–1913

We believe that the fact that K-wave pattern can be traced back in the GDP dynamics of the West for the pre-1870 period and that it is not found for the world GDP dynamics is not coincidental, and cannot be accounted for just on the basis of the unreliability of the world GDP estimates for this period. In fact, it is not surprising that the Western GDP growth rates were generally higher in 1851–1875 than in 1876–1894, and the world growth

rates were not. The proximate explanation is very simple. The world GDP growth rates in 1851–1875 were relatively low (in comparison with 1876–1894) mostly due to the enormous economic decline observed in China in 1852–1870 due to social-demographic collapse in connection with the Taiping Rebellion and accompanying events of additional episodes of internal warfare, famines, epidemics and so on (Ilyushechkin 1967; Perkins 1969: 204; Larin 1986; Kuhn 1978; Liu 1978; Nepomnin 2005, *etc.*) that resulted, for example, in the human death toll as high as 118 million human lives (Huang 2002: 528). Note that in the mid-nineteenth century China was still a major world economic player, and the China's decline of that time affected the world GDP dynamics in a rather significant way. According to Maddison's estimates, in 1850 the Chinese GDP was about 247 billion international dollars (1990, PPP), as compared with about 63 billion in Great Britain, or 43 billion in the USA. By 1870, according to Maddison, it declined to less than \$190 billion, which to a large degree compensated the acceleration of economic growth observed in the same years in the West (actually, Maddison appears to underestimate the magnitude of the Chinese economic decline in this period, so the actual influence of the Chinese 1852–1870 sociodemographic collapse might have been even much more significant). K2 Phase A in the Western GDP dynamics started to be felt at the world level only in the very end of this phase, in 1871–1875, after the end of the collapse period in China and the beginning of the recovery growth in this country.

In more general terms, it seems possible to maintain that in the pre-1870 epoch the Modern World System was not sufficiently integrated, and the World System core was not sufficiently strong yet – that is why the rhythm of the Western core's development was not quite felt at the world level. Only in the subsequent era does the World System reach such a level of integration and its core acquires such strength that it appears possible to trace quite securely Kondratieff waves in the world GDP dynamics.⁶

Kondratieff Waves in the World Technological Innovation Dynamics

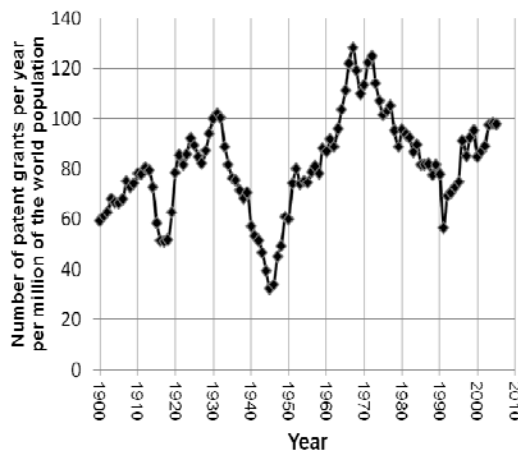
Naturally, the connection between the K-waves and technological innovation processes deserves special attention. In order to re-test the Kondratieff – Schumpeter hypothesis for the presence of K-waves with regard to the world invention activities, we have used the World Intellectual Property Organization (WIPO) Statistics Database on the number of patents granted annually in the world per million of the world population in 1900–2008 (see Korotayev, Zinkina, and Bogevolnov 2011 for more details). For 1985–2008 WIPO publishes direct data on the total number of patent grants in the world per year (WIPO 2012a). For the 1900–1985 we calculated this figure by summing up the data for all the countries (that are

⁶ The fact that K-waves can be traced in Western economic dynamics earlier than at the world level has already been noticed by Reuveny and Thompson (2008) who provide the following explanation: if one takes the position that the core driver of K-waves is intermittent radical technological growth primarily originating in the system leader's economy, one would not expect world GDP to mirror K-wave shapes as well as the patterned fluctuations that are found in the lead economy and that world GDP might correspond more closely to the lead economy's fluctuations over time as the lead economy evolves into a more predominant central motor for the world economy. Reuveny and Thompson also argue that to the extent that technology drives long-term economic growth, the main problem (certainly not the only one) in diffusing economic growth throughout the system is that the technology spreads unevenly. Most of it stays in the already affluent North and the rest fell farther behind the technological frontier. Until recently very little trickled down to the global South (Reuveny and Thompson 2001, 2004, 2008, 2009). Our findings also seem to match this interpretation.

provided by the WIPO in a separate dataset [WIPO 2012b]). We used the databases of Maddison (2010), UN Population Division (2012), and U.S. Bureau of the Census (2012) as our sources of data on the world population dynamics.

The results of our calculations are presented in Fig. 16.

Fig. 16. Dynamics of number of patent grants per year per million of the world population, 1900–2008



It is evident that the figure above reveals an unusually distinct K-wave pattern (note that a similar pattern has been detected in the dynamics of patent applications by Plakitkin [2011] who, however, did not appreciate that he dealt with K-wave dynamics). In general, we see rather steady increases in the number of patent grants per million during K-wave A-phases ('upswings'), and we observe its rather pronounced decreases during K-wave B-phases ('downswings'). Thus, the first period of the growth of the variable in question revealed by Fig. 16 more or less coincided (with a rather slight, about 2–3 years, lag) with A-phase of the 3rd K-wave (1896–1929); it was only interrupted by the First World War when the number of patent grants per million experienced a precipitous but rather short decline, whereas after the war the value of the variable in question returned as fast to the A-phase-specific trend line. The first prolonged period of decline of the number of patent grants per million corresponds rather accurately (except for the above mentioned 2–3 year lag) to B-phase of this wave (1929–1945); the second period of steady increase in the value of the variable in question correlates almost perfectly with A-phase of the 4th K-wave (1945–1968/74), whereas the second period of decline corresponds rather well to its B-phase (1968/74–1984/1991); finally, the latest period of the growth of the number of patent grants per million correlates with A-phase of the 5th K-wave.

Note, however, that this pattern apparently goes counter the logic suggested by Kondratieff, Schumpeter and their followers who expected increases in invention activities during B-phases and decreases during A-phases. Yet, this contradiction is only apparent. Indeed, as we have mentioned above, Kondratieff maintained that 'during the recession of the long waves, an especially large number of *important* discoveries and inventions in the technique of production and communication are made, which, however, are usually applied on a large scale only at the beginning of *the next long upswing*' (Kondratieff 1935: 111, our emphasis).

It has been suggested that it is necessary to distinguish between ‘breakthrough’ and ‘improving’ inventions (*e.g.*, Akaev 2010); breakthrough inventions are those that during a B-phase of a given K-wave create foundations for a new technological system corresponding to a new K-wave. As Kondratieff suggested, they find their large-scale application during the A-phase of the new K-wave based on this new technological system, which is accompanied by a flood of improving innovations that are essential for the diffusion of technologies produced by breakthrough inventions made during the B-phase of the preceding K-wave (*Ibid.*; Hirooka 2006).

Note that among the total number of patents a negligible proportion has been granted for breakthrough inventions, whereas the overwhelming majority of all the inventions is constituted just by ‘improving’ inventions. The exhaustion of the potential of the given K-wave's technological system leads to a decrease of the number of inventions that realize the potential created by the breakthroughs, which created the respective technological system. On the other hand, this very exhaustion of the previous technological system's potential for improvement creates powerful stimuli for new breakthrough inventions. However, the increase in the number of breakthrough inventions in no way compensates the dramatic decrease of the number of innovations improving the potential of the previous technological system. Hence, on the basis of this logic there are theoretical grounds to expect that during the B-phases of K-waves the total number of inventions (and patent grants) per million of population should decrease, whereas during A-phases we should observe a pronounced increase in this number (as some decrease in the number of breakthrough inventions is by far compensated by a dramatic increase in the number of improving inventions).

Therefore, our test has revealed this pattern.

World System Effects and K-Wave Dynamics

As has been already mentioned above, the adherents of the world-system approach consider K-waves as one of the most important components of the World System dynamics.

We quite agree with Thompson (2007) who maintains that K-waves may help to clarify many important points in the World System processes. However, one could also trace another kind of logic – the analysis of the World System processes can contribute a lot to the clarification of the nature of the Kondratieff waves. We believe that the driving forces of the K-waves can be adequately understood if only we take into account the dynamics, phases, and peculiarities of the World-System development. That is why we have tried to analyze K-waves on a World-System scale. Such an approach can integrate different points of view on the nature of Kondratieff waves.

Actually, we can consider the following five points:

1. Kondratieff waves are most relevant when considered at the System scale. As those waves always manifest themselves at supra-societal scales, the World System processes turn out to be very important for the understanding of the K-wave dynamics.

2. The expansion and intensification of the World-System economic links lead to the formation of preconditions of new upswings. Note that Kondratieff himself noticed that ‘the new long cycles usually coincide with the expansion of the orbit of the world economic ties’ (Kondratieff 2002: 374). We would add that the beginning of new cycles implies not only expansion of those ties, but also the change of their nature (we will discuss this in more details below).

3. The World System processes are bound to influence economic processes (including medium period business cycles [*e.g.*, Grinin and Korotayev 2009b]), hence, they are bound to influence K-wave dynamics. However, we also observe a reverse influence of those waves on World System development (which was actually noticed by Thompson). Kondratieff himself noticed the growth in the intensity of warfare and revolutionary activities during K-wave upswings (Kondratieff 2002: 373–374). On the other hand, it is quite clear that those processes themselves influenced K-wave dynamics in a very significant way and world wars provide salient illustrations). It is quite clear that those K-wave students who pointed to an important role of military expenses (and inflation shocks they produce) identified a significant (though in no way sole) cause of price growth (and decline) in the course of Kondratieff cycles.

4. As we have already mentioned above, the breakthrough inventions (producing new technological systems) tend to be made during downswings, whereas their wide implementation is observed during subsequent upswings. The diffusion of those innovations throughout the World System significantly affects the course of K-waves, as the opening of new zones of economic development can change the world dynamics in general. Thus, in Chapter 1 of our monograph on periodic economic crises (Grinin and Korotayev 2009b) we paid considerable attention to the point that the vigorous railway construction of the last decades of the nineteenth century produced a major vector in world economic development (see, *e.g.*, Tugan-Baranovsky 2008 [1913]; Mendelson 1959, vol. 2; Trakhtenberg 1963; Lan 1975). Large-scale investments of British capital in the railway construction in the United States, Australia, India, *etc.* contributed to stagnation within the World System hegemon (and, finally, the change of the center of this hegemony). Technological changes that start in one zone of the World System after their diffusion to other zones may produce such consequences that could hardly be forecasted. Thus, the development of oceanic and railway transportation led to vigorous exportation of cereal crops from the USA, Russia, and Canada that caused in the 1870s, 1880s, and 1890s the so-called world agrarian crisis (which affected significantly the 2nd K-wave downswing but helped several countries to escape from the Malthusian trap [see, *e.g.*, Grinin, Korotayev, and Malkov 2010]).

5. Important events that take place within the World System sooner or later can lead to a switch from downswing to upswing (or, naturally, from upswing to downswing) within K-wave dynamics. As is well-known, the discovery of gold in California and Australia contributed in a rather significant way to the world economic (and price) growth during the 2nd K-wave upswing, which was already noticed by Kondratieff (Kondratieff 2002: 384–385).

Change of K-Wave Phases against the Background of the Interaction between the World-System Core and Periphery

Core and Periphery. We contend that the change of K-wave upswing and downswing phases correlates significantly with the phases of fluctuations in the relationships between the World System Core and Periphery, as well as with World System Core changes (the growth or decline of its strength, emergence of competing centers, their movements, and so on). Below we present our ideas on the possible causes of such a correlation. However, it turns out necessary to study the following questions: does this correlation emerge as

a result of the casual link between the two processes? Is it caused by some other processes? Is not the causation pattern here even more complex? In any case this correlation appears especially important, as in the recent years one can observe an evident change in the interaction between the Core and Periphery of the World System. In particular, the World-System Periphery (in contrast with what was observed not so long ago) tends to develop more rapidly than the core (see, e.g., Korotayev *et al.* 2011; Khaltourina and Korotayev 2010; Korotayev, Khaltourina, Malkov *et al.* 2010; Malkov *et al.* 2010; Grinin and Korotayev 2009b, 2010). This has become especially salient during the current global economic crisis.

Thus, what is the correlation between structural changes of the World System and periodic fluctuations within the K-wave dynamics?

We suggest that during the K-wave downswings the Core tends to subjugate, integrate, and pull up the Periphery to a greater extent than it is observed during the K-wave upswings. It is during the K-wave downswings that the Core tends to expand vigorously (in various way) to the Periphery by investing resources into the latter and by actively modernizing it. Those efforts and resource flows contribute to the slow-down of the Core growth rates.

In contrast, during K-wave upswings the Core's activities are concentrated within the core part of the World System; in the meantime the balance of resource movement turns out to be in favor of the Core. Such a situation leads to the acceleration of growth rates of the Core countries (note, however, that this situation was not observed during the most recent [5th K-wave] upswing).

The resource flow from the World-System Core to the Semiperiphery and Periphery may proceed in various forms (military expenditures, FDI, aid, emigration, and so on). Of course, such actions were usually undertaken by the Core countries in order to obtain certain concrete gains: to get colonies, to obtain profits, to get influence in certain countries, to open markets, to get access to raw materials and so on (though the philanthropic component tended to become more and more pronounced with the course of time). However, it takes any long-term investments a long time to pay for themselves (and sometimes they do not – especially when they are made by politicians rather than businessmen). Often such a resource flow proceeded in the form of loans many of which were never paid back.

The resource flow to the Core could be also achieved in various forms – ranging from a direct plunder of colonies to importing very cheap commodities from them; it was also achieved through monopoly prices, unfair loans, and so on. The 2nd K-wave upswing (the late 1840s to the 1870s) was supported to a very considerable extent by the flow of gold from such peripheral areas as California and Australia. In recent years one could observe certain exportation of capitals from the Periphery and Semiperiphery to the Core, as has been observed for China, Brazil, and Russia as regards the U.S. securities; one may also note cheap Chinese exports, brain drain from India, *etc.*

Let us study how this works with respect to particular K-waves and their phases.

The First Wave: The Late 1780s / Early 1790s – 1844/1851

Phase A: the late 1780s / early 1790s – 1810/1817. By that period the main colonial conquests of the pre-industrial epoch had been already finished, the independence wars of the New World colonies began, and the main interests of the European powers were focused on internal affairs. In this period the resource flow from the Core to the Periphery was rather

insignificant, whereas the one from the Periphery to the Core remained quite substantial. The Periphery and Semiperiphery (the USA in the first place) acted as suppliers of raw materials (cotton) for the development of the most advanced industrial sectors (Burstin 1993a, 1993b; Sevostyanov 1983; DiBacco *et al.* 1992; Zinn 1995).

Phase B (downswing): 1810/1817–1844/1851. Europe (primarily Britain and France) engaged in rather active expansion on the Periphery – China, Algeria, Egypt, Turkey, and Latin America. British loans and investments went to Latin America and the USA (Tugan-Baranovsky 2008 [1913]; Mendelson 1959). There was a massive emigration from Europe (and especially Britain) to the West European offshoots; one could observe the active opening of Australia (*e.g.*, Malakhovski 1971), the South and the West of the USA. In this period resources moved from Britain rather than to Britain. This partly accounts for relatively bad conditions of the working class in Britain at this time (vividly described by Engels 2009 [1845]).

The Second Wave: 1844/1851–1890/1896

Phase A: 1844/1851–1870/1875. Europe again concentrated on its internal affairs (including the Crimean War, the unification of Germany and Italy and so on). The USA was tied by internal struggles, and Russia was focused on internal reforms. A free trade system is established (*e.g.*, Held *et al.* 1999). The flow of Australian and Californian gold reached Europe; one could observe a rather active catch-up of the European Semiperiphery (Grinin and Korotayev 2009b).

Phase B: 1870/1875–1890/1896. Europe actively expanded to the Periphery, actually the world was mostly divided between the Core powers that accomplish the final wave of colonial conquests (this involves some semiperipheral countries, first of all Russia conquered most part of Central Asia). One could observe an active opening of agricultural lands in the American West (Burstin 1993a, 1993b; Sevostyanov 1983; DiBacco, Mason, and Appy 1992; Zinn 1995) and a very rapid development of Australia (*e.g.*, Malakhovski 1971), as well as significant investments in the Periphery (especially in the railroad construction). Actually, during this period resources moved rather actively from Britain and some other European countries to the Periphery – for example, as loans for Latin America (*e.g.*, Tugan-Baranovsky 2008 [1913]; Mendelson 1959).

The Third Wave: 1890/1896–1945

Phase A: 1890/1896–1914/1928. Europe is concentrated on internal competition within itself (resulting finally in an outright warfare), the USA is also concentrated on its own internal affairs (with the exception of a war with Spain); the preparations for the war and competition between Germany and Britain stimulate the technological race and economic growth (*e.g.*, Grenville 1999). One could observe a significant flow of resources from the Periphery, as well as the start of the transition of the World System hegemony to the USA that, however, continued to be an importer of capital for a long time (*e.g.*, Lan 1975). Resources also flowed actively to Russia, Japan and some other semiperipheral countries where investors could find opportunities to introduce new technologies and get high profits.

Phase B: 1914/1928–1939/1950. Activation of the Periphery and Semiperiphery, its struggle with the Core in various forms (India, China, Egypt, the USSR, Japan, *etc.*), the finalizing of the transition of the World System hegemony from Europe to the USA

(see, *e.g.*, Modelski and Thompson 1996; Grinin and Korotayev 2009b; Lan 1976). The continuation of the Core countries control over their colonies requires more and more efforts and expenses.

The Fourth Wave: 1939/1950–1984/1991

Phase A: 1939/1950–1968/1974. The Core lost direct political control over the Periphery and was concentrated on its own internal affairs (including the West European integration); as a result of this concentration and the redistribution of capitals and technologies within the World-System Core one could observe the Japanese, German, Italian, and Spanish economic miracles, as well as the consolidation of the Western world under the US hegemony (*e.g.*, Lan 1978); one could also observe the emergence of new centers of development, including the Eastern Block and Japan (*e.g.*, Popov 1978).

Phase B: 1968/1974–1984/1991. The Periphery ‘attacked’ the Core in terms of economy – first of all through a radical increase in oil and some other raw material prices. In the meantime the West invests rather actively in the Periphery (especially, through loans to the developing countries).

The Fifth Wave: 1984/1991–2015/20 (?)

Phase A: 1984/1991–2001/2007. This phase displays certain peculiarities in comparison with previous upswings, as during this period the main economic growth was generated not by the Core, but rather by the Periphery whose strongest countries moved to the Semi-periphery and even became new centers of growth.⁷ Many Core countries (especially in Europe) were concentrated on their internal affairs. In the meantime one could observe a rather active exchange of resources between the Core and the Periphery. On the one hand, industrial production moved from the Core to the Periphery; on the other hand, one can observe a vigorous flow of cheap manufactured products from the Periphery to the Core, whereas the Western countries became financial net importers (especially, through the movement of petrodollars). The USA actively exchanged ‘paper’ dollars for manufactured goods from the periphery, which contributed to the explosive growth of the US public debt (see, *e.g.*, Akaev, Korotayev, and Fomin 2012). One may also take into account the Periphery – Core labor migration. Thus, at the first glance the balance of exchange looked as if being in favor of the Core. On the other hand, one should take into account the fact that those processes were accompanied by the acceleration of the economic growth in the Periphery and its slowdown in the Core – so, actually the Periphery favored from them more than the Core. One may suppose that this was supported by a substantial transformation of national sovereignty that opened borders for the flows of foreign capitals and technologies (see Grinin 2005, 2008a, 2008b, 2008c, 2008d; Grinin and Korotayev 2009a, 2009b, 2010; see Grinin 2008e, 2008f, 2009b on the processes of decrease of sovereignty prerogatives).

Phase B: 2001/2007–2015/2020. By now we observe the weakening of the Core and the activation of new centers; one may expect a search for a new balance of power and new coalitions (see Grinin 2009a, 2010, 2011; Grinin and Korotayev 2010 for more details).

Now let us consider some characteristics and causes of those processes.

⁷ This somehow resembles the situation during the 3rd K-wave upswing, when the growth was generated in still semi-peripheral Germany, the USA, and Russia, rather than in still hegemonic Britain.

Possible causes of the expansion. It is natural to suppose that particular strong Juglar crises and depressions typical for K-wave downswings in the Core countries stimulate the Core expansion on the Periphery.⁸ Such an expansion can be considered a result (and as a part) of counter-crisis measures undertaken by the Core countries. In addition, one may take into account the imitation competition effect – the intensification of expansion efforts by one state tend to provoke such an intensification on the part of competing states.

In what way does the expansion contribute to the additional slow-down of the economic development during the downswing?

1. In the course of such an expansion the energy of the Core tended to become exhausted.

2. In addition, the Core powers could be exhausted by their struggles over their control over the World System Periphery. In any case the growth of this control involved substantial expenses (and sometimes serious destruction). In the previous periods this could additionally weaken the Periphery. On the other hand, results of mutually beneficial expansion may be felt with a substantial lag.

3. On the other hand, the fast development was often hindered by the insufficient congruence of the economic structures of the Core and Periphery, a huge gap in the levels of economic development that was observed in many cases.

4. One cannot exclude that we deal here with a sort of positive feedback: the worsening of the economic situation in the Core stimulated its expansion to the Periphery, whereas the growing expenses to support this expansion may have worsened the situation in the Core.

5. As a result of the active integration of the Periphery into the World System, the transformation of the Hinterland into Periphery, a part of the Periphery into Semiperiphery, and the formation of new centers in the Semiperiphery the World System expanded, the number of links and contact intensity within it increased explosively, *etc.*; this, however, led to a certain slowdown of the World System economic growth.

6. Downswings are also connected with the weakening of the old Hegemon. This weakens the structural congruence of the World System and supports the trend toward the slowdown of the economic growth rates. We are likely to observe such a pattern in the forthcoming years. On the other hand, it appears virtually impossible to replace the USA as the World System Hegemon, because the USA is a multifunctional Hegemon, whereas no other power will be able to play such a role in the forthcoming decades. That is why there are grounds to expect the reconfiguration of the World System as a whole (see Grinin 2009a, 2010; Grinin and Korotayev 2010 for more details).

Slowdowns of the world economic growth are often connected with the slowdown of the economic growth of the Hegemon.

During upswings the resource movement balance tends to be in favor of the Core.

1. During the upswing, the World System Core tends to concentrate on its internal affairs (including the struggles between the Core countries), and consequently it tends to move less resources to the Periphery.

⁸ On the other hand, the weakening of the Core makes it possible for the Periphery to undertake counter-expansion, as was observed in the 1970s and early 1980s as regards fuel prices. Their explosive growth led to the flow of resources from the Core to the Periphery.

2. Resource accumulation, restructuring of relationships within the core, as well as the emergence of new (and especially military) technologies stimulate the escalation of hegemonic struggles within the Core.

3. By themselves those struggles and wars contribute to the acceleration of both inflation and economic growth (thus, we are dealing here with a certain positive feedback).

4. An important factor of the change of the resource movement balance in favor of the Core was constituted by the fact that the previous investment started to produce returns; in particular, the long-term investments in the infrastructure started to produce results; the trade-financial links started to work, scarcely populated territories were peopled (as was observed, *e.g.*, in Australia in the first half of the nineteenth century), and so on.

5. On the other hand, new peripheral regions were involved in global trade. Those regions in order to do this often had to export their commodities with reduced prices (which often implied non-equivalent exchange – see Grinin and Korotayev 2012 for more details).⁹

References

- Abramovitz, M. 1961.** The Nature and Significance of Kuznets Cycles. *Economic Development and Cultural Change* 9(3): 225–248.
- Akaev, A. A. 2010.** Modern Financial and Economic Crisis in the Light of the Theory of the Economy's Innovative and Technological Development of Economy and Controlling of Innovative Process. In Khaltourina, D. A., and Korotayev, A. V. (eds.), *System Monitoring of Global and Regional Development* (pp. 230–258). Moscow: LIBROKOM. *In Russian.*
- Akaev, A. A., Korotayev, A. V., and Fomin, A. A. 2012.** Global Inflation Dynamics: Regularities and Forecasts. *Structure and Dynamics* 5(3): 3–18.
- Akaev, A. A., Rumyantseva, S. Yu., Sarygulov, A. I., and Sokolov, V. N. 2011.** *Economic Cycles and Economic Development*. St. Petersburg: Technical University. *In Russian.*
- Akaev, A. A., and Sadovnichy, V. A. 2010.** About the New Methodology of Long-Term Cyclic Forecasting of World and Russian Economics Development Dynamics. In Akaev, A. A., Korotayev, A. V., and Malinetsky, G. G. (eds.), *Forecasting and Modeling of Crises and World Dynamics* (pp. 5–69). Moscow: LKI/URSS. *In Russian.*
- Åkerman, J. 1932.** *Economic Progress and Economic Crises*. London: Macmillan.
- Ayres, R. U. 2006.** Did the Fifth K-Wave Begin in 1990–1992? Has it been Aborted by Globalization? In Devezas, T. C. (ed.), *Kondratieff Waves, Warfare and World Security* (pp. 57–71). Amsterdam: IOS Press.
- Barr, K. 1979.** Long Waves: A Selective Annotated Bibliography. *Review* 2(4): 675–718.

⁹ Note, however, that during the 4th K-wave downswing and the 5th K-wave upswing one could observe the change of the World System trend toward the growing divergence between the Core and Periphery to the trend toward convergence. Before this switch of the global trends the gap between the Core and the Periphery tended to increase; now it tends to decrease (Korotayev *et al.* 2011; Korotayev and Khaltourina 2009; Khaltourina and Korotayev 2010; Malkov *et al.* 2010; Korotayev, Khaltourina and Bogevolnov 2010). As a result, as has been mentioned above, we could observe the decrease of the gap between the Core and the Periphery already during the 5th K-wave upswing. Note, that if the hypothesis that we have spelled out above is true, then we should expect the acceleration of the Core – Periphery convergence during the current (5th) K-wave.

- Bernstein, E. M. 1940.** War and the Pattern of Business Cycles. *American Economic Review* 30: 524–535.
- Berry, B. J. L. 1991.** *Long Wave Rhythms in Economic Development and Political Behavior*. Baltimore, MD: Johns Hopkins University Press.
- Beveridge, W. H. 1921.** Weather and Harvest Cycles. *The Economic Journal* 31: 429–449.
- Beveridge, W. H. 1922.** Wheat Prices and Rainfall in Western Europe. *Journal of the Royal Statistical Society* 85(3): 412–475.
- Bieshaar, H., and Kleinknecht, A. 1984.** Kondratieff Long Waves in Aggregate Output? An Econometric Test. *Konjunkturpolitik* 30(5): 279–303.
- Bobrovnikov, A. V. 2004.** *Macro-cycles in the Economy of Latin America's Countries*. Moscow: Institution of Latin America, RAS. In Russian.
- BP 2010.** *British Petroleum Statistical Review of World Energy*. London, 1971–2008.
- Bunyatyan, M. A. 1915.** *Economic Crises. The Experience of Mythology and Theory of Cyclical Economic Crises and Conjunctures' Theories*. Moscow: Mysl. In Russian.
- Burstin, D. 1993a.** *The Americans. The Colonial Experience*. Moscow: Progress-Litera. In Russian.
- Burstin, D. 1993b.** *The Americans. The National Experience*. Moscow: Progress-Litera. In Russian.
- Chase-Dunn, Ch., and Grimes, P. 1995.** World-Systems Analysis. *Annual Review of Sociology* 21: 387–417.
- Cleary, M. N., and Hobbs, G. D. 1983.** The Fifty Year Cycle: A Look at the Empirical Evidence. In Freeman, Chr. (ed.), *Long Waves in the World Economy* (pp. 164–182). London: Butterworth.
- Conference Board. 2011.** *The Conference Board Total Economy Database*, January 2011. URL: <http://www.conference-board.org/data/economydatabase/>.
- Dator, J. 2006.** Alternative Futures for K-Waves. In Devezas, T. C. (ed.), *Kondratieff Waves, Warfare and World Security* (pp. 311–317). Amsterdam: IOS Press.
- Devezas, T., and Corredine, J. 2001.** The Biological Determinants of Long-wave Behaviour in Socioeconomic Growth and Development. *Technological Forecasting and Social Change* 68: 1–57.
- Devezas, T., and Corredine, J. 2002.** The Nonlinear Dynamics of Technoeconomic Systems. An Informational Interpretation. *Technological Forecasting and Social Change* 69: 317–357.
- Devezas, T. C., Linstone, H. A., and Santos, H. J. S. 2005.** The Growth Dynamics of the Internet and the Long Wave Theory. *Technological Forecasting and Social Change* 72: 913–935.
- Devezas, T., and Modelski, G. 2003.** Power Law Behavior and World System Evolution: A Millennial Learning Process. *Technological Forecasting and Social Change* 70: 819–859.
- DiBacco, Th. V., Mason, L. C., and Appy, Ch. G. 1992.** *History of the United States*. Vol. 2. *Civil War to the Present*. Boston, MA: Houghton Mifflin Company.
- Dickson, D. 1983.** Technology and Cycles of Boom and Bust. *Science* 219(4587): 933–936.
- Diebolt, C., and Doliger, C. 2006.** Economic Cycles under Test: A Spectral Analysis. In Devezas, T. C. (ed.), *Kondratieff Waves, Warfare and World Security* (pp. 39–47). Amsterdam: IOS Press.

- Duijn, J. J. van. 1979.** The Long Wave in Economic Life. *De Economist* 125(4): 544–576.
- Duijn, J. J. van. 1981.** Fluctuations in Innovations over Time. *Futures* 13(4): 264–275.
- Duijn, J. J. van. 1983.** *The Long Wave in Economic Life*. Boston, MA: Allen and Unwin.
- Dupriez, L. H. 1947.** *Des mouvements économiques généraux*. Vol. 2. Pt. 3. Louvain: Institut de recherches économiques et sociales de l'université de Louvain.
- Eklund, K. 1980.** Long Waves in the Development of Capitalism? *Kyklos* 33(3): 383–419.
- Engels, F. 2009 [1845].** *The Condition of the Working Class in England*. Oxford: Oxford University Press.
- Ewijk, C. van. 1982.** A Spectral Analysis of the Kondratieff Cycle. *Kyklos* 35(3): 468–499.
- Forrester, J. W. 1978.** *Innovation and the Economic Long Wave*. MIT System Dynamics Group working paper. Cambridge, MA: MIT.
- Forrester, J. W. 1981.** *The Kondratieff Cycle and Changing Economic Conditions*. MIT System Dynamics Group working paper. Cambridge, MA: MIT.
- Forrester, J. W. 1985.** Economic Conditions Ahead: Understanding the Kondratieff Wave. *Futurist* 19(3): 16–20.
- Freeman, C. 1987.** Technical Innovation, Diffusion, and Long Cycles of Economic Development. In Vasko, T. (ed.), *The Long-Wave Debate* (pp. 295–309). Berlin: Springer.
- Garvy, G. 1943.** Kondratieff's Theory of Long Cycles. *Review of Economic Statistics* 25(4): 203–220.
- Gelderen, J. van [J. Fedder pseudo]. 1913.** Springvloed: Beschouwingen over industriele ontwikkeling en prijsbeweging (Spring Tides of Industrial Development and Price Movements). *De nieuwe tijd* 18.
- Glazyev, S. Yu. 1993.** *The Theory of Long-Term Technical Economic Development*. Moscow: VlaDar. In Russian.
- Glismann, H. H., Rodemer, H., and Wolter, W. 1983.** Long Waves in Economic Development: Causes and Empirical Evidence. In Freeman, Ch. (ed.), *Long Waves in the World Economy* (pp. 135–163). London: Butterworth.
- Goldstein, J. 1988.** *Long Cycles: Prosperity and War in the Modern Age*. New Haven, CT: Yale University Press.
- Gordon, D. M. 1978.** Up and Down the Long Roller Coaster. In Steinberg, B. (ed.), *U.S. Capitalism in Crisis* (pp. 22–34). New York: Economics Education Project of the Union for Radical Political Economics.
- Grenville, J. A. S. 1999.** *Europe Reshaped: 1848–1878*. Somerset: John Wiley & Sons, Incorporated.
- Grinin, L. E. 2005.** Globalization and National Sovereignty. *Istoria i sovremennost'* 1: 6–31. In Russian.
- Grinin, L. E. 2008a.** Globalization and the Process of National Sovereignty's Transformation. *Vek globalizatsii* 1: 86–97. In Russian.
- Grinin, L. E. 2008b.** National Sovereignty and the Process of Globalization (Preliminary Notes). *Polis* 1: 123–133. In Russian.
- Grinin, L. E. 2008c.** Globalization and the Models of Sovereignty's Transformation in Western and Non-Western Countries. In Kulpin, E. S. (ed.), *The Man and the Nature: The Challenge and the Answer* (pp. 56–88). Moscow: IATs-Energia. In Russian.

- Grinin, L. E. 2008d.** National Sovereignty in the Globalization's Era. Sovereignty. In Ilyin, M. V., and Kudryashova, I. V. (eds.), *Transformation of Notions and Practices* (pp. 104–128). Moscow: Moscow State Institute of International Relations – University. *In Russian.*
- Grinin, L. E. 2008e.** Globalization and Sovereignty: Why do States Abandon Their Sovereign Prerogatives? *Age of Globalization* 1: 22–32.
- Grinin, L. E. 2008f.** Transformation of Sovereignty and Globalization. In Grinin, L. Beliaev, D., and Korotayev, A. (eds.), *Hierarchy and Power in the History of Civilisations: Political Aspects of Modernity* (pp. 191–224). Moscow: LIBROCOM/ URSS.
- Grinin, L. E. 2009a.** Will the Global Crisis Lead to Global Changes? *Vek globalizatsii* 2: 117–140. *In Russian.*
- Grinin, L. E. 2009b.** Globalization and the Transformation of National Sovereignty. In Sheffield, J. (ed.), *Systemic Development: Local Solutions in a Global Environment* (pp. 47–53). Goodyear: ISCE Publishing.
- Grinin, L. E. 2010.** Which Global Transformations would the Global Crisis Lead To? *Age of Globalization* 2: 31–52.
- Grinin, L. E. 2011.** *The Evolution of Statehood. From Early State to Global Society.* Saarbrücken: Lambert Academic Publishing.
- Grinin, L. E., and Korotayev, A. V. 2009a.** *Social Macroeolution. Genesis and Transformations of the World-System.* Moscow: LIBROCOM. *In Russian.*
- Grinin, L. E., and Korotayev, A. V. 2009b.** *Global Crisis in Retrospect: A Brief History of Rises and Crises; From Lyscurgus to Alan Greenspan.* Moscow: LIBROCOM. *In Russian.*
- Grinin, L. E., and Korotayev, A. V. 2010.** Will the Global Crisis Lead to Global Transformations? Part 2. The Coming Epoch of New Coalitions. *Journal of Globalization Studies* 1(2): 166–183.
- Grinin, L. E., and Korotayev, A. V. 2012.** *Cycles, Crises, Traps of the Modern World System. The Study of Kondratieff, Juglar and Secular Cycles, Global Crises, Malthusian and Post-Malthusian Traps.* Moscow: LKI/URSS. *In Russian.*
- Grinin, L. E., Korotayev, A. V., and Malkov, S. Yu. 2010.** A Mathematical Model of Juglar Cycles and the Current Global Crisis. In Grinin, L., Herrmann, P., Korotayev, A., and Tausch, A. (eds.), *History & Mathematics: Processes and Models of Global Dynamics* (pp. 138–187). Moscow: Uchitel.
- Grinin, L. E., Korotayev, A. V., and Tsirel, S. V. 2011.** *Cycles of the Modern World-System's Development.* Moscow: LIBROCOM. *In Russian.*
- Held, D., McGrew, A., Goldblatt, D., and Perraton, J. 1999.** *Global Transformations. Politics, Economics and Culture.* Stanford, CA: Stanford University Press.
- Hirooka, M. 2006.** *Innovation Dynamism and Economic Growth. A Nonlinear Perspective.* Cheltenham – Northampton, MA: Edward Elgar.
- Huang, P. C. C. 2002.** Development or Involution in Eighteenth-Century Britain and China? *The Journal of Asian Studies* 61: 501–538.
- Ilyushechkin, V. P. 1967.** *The Taipings' Peasant War.* Moscow: Nauka. *In Russian.*
- Jourdon, Ph. 2008.** *La monnaie unique europeenne et son lien au developpement economique et social coordonne: une analyse cliometrique.* Thèse. Montpellier: Universite Montpellier I.

- Khaltourina, D. A., and Korotayev, A. V. 2010.** System Monitoring of Global and Regional Development. In Khaltourina, D. A., and Korotayev, A. V. (eds.), *System Monitoring: Global and Regional Development* (pp. 11–118). Moscow: LIBROCOM/URSS. *In Russian.*
- Kitchin, J. 1923.** Cycles and Trends in Economic Factors. *Review of Economic Statistics* 5: 10–16.
- Kleinknecht, A., and van der Panne, G. 2006.** Who Was Right? Kuznets in 1930 or Schumpeter in 1939? In Devezas, T. C. (ed.), *Kondratieff Waves, Warfare and World Security* (pp. 118–127). Amsterdam: IOS Press.
- Kondratieff, N. D. 1922.** *World Economy and its Conjuncture During and After the War.* Vologda: Regional Branch of the State Publishing House. *In Russian.*
- Kondratieff, N. D. 1925.** The Major Cycles of the Conjuncture. *Voprosy Konyunktury* 1(1): 28–79. *In Russian.*
- Kondratieff, N. D. 1926.** Die langen Wellen der Konjunktur. *Archiv für Sozialwissenschaft und Sozialpolitik* 56(3): 573–609.
- Kondratieff, N. D. 1928.** *The Major Cycles of the Conjuncture. Presentations and their Discussion in the Institute of Economics.* Moscow: Institute of Economics. *In Russian.*
- Kondratieff, N. D. 1935.** The Long Waves in Economic Life. *The Review of Economic Statistics* 17(6): 105–115.
- Kondratieff, N. D. 1984.** *The Long Wave Cycle.* New York: Richardson & Snyder.
- Kondratieff, N. D. 2002 [1926].** *The Major Cycles of the Conjuncture and the Theory of Forecast.* Moscow: Ekonomika. *In Russian.*
- Korotayev, A., and Khaltourina, D. 2006.** *Introduction to Social Macrodynamics: Secular Cycles and Millennial Trends in Africa.* Moscow: KomKniga/URSS.
- Korotayev, A. V., and Khaltourina, D. A. 2009.** *Modern Tendencies of World Development.* Moscow: LIBROCOM/URSS. *In Russian.*
- Korotayev, A. V., Khaltourina, D. A., and Bogevolnov, Yu. V. 2010.** *The Laws of History. Secular Cycles and Millennium Trends. Demography. Economy, Wars.* 3rd ed. Moscow: LKI/URSS. *In Russian.*
- Korotayev, A. V., Khaltourina, D. A., Malkov, A. S., Bogevolnov, Yu. V., Kobzeva, S. V., and Zinkina, Yu. V. 2010.** *The Law of History: Mathematical Modeling and Forecasting of World and Regional Development.* Moscow: LKI/URSS. *In Russian.*
- Korotayev, A., Malkov, A., and Khaltourina, D. 2006.** *Introduction to Social Macrodynamics: Secular Cycles and Millennial Trends.* Moscow: KomKniga/URSS.
- Korotayev, A. V., and Tsirel, S. V. 2010a.** Kondratieff Waves in the World Economic Dynamics. In Khaltourina, D. A., and Korotayev, A. V. *System Monitoring: Global and Regional Development* (pp. 189–229). Moscow: LIBROCOM/URSS. *In Russian.*
- Korotayev, A. V., and Tsirel, S. V. 2010b.** Kondratieff Waves in the World Economic Dynamics. In Akaev, A. A., Korotayev, A. V., and Malinetsky, G. G. (eds.), *Prognosis and Modeling of Crises and World Dynamics* (pp. 5–69). Moscow: LKI/URSS. *In Russian.*
- Korotayev, A., and Tsirel, S. 2010c.** A Spectral Analysis of World GDP Dynamics: Kondratieff Waves, Kuznets Swings, Juglar and Kitchin Cycles in Global Economic Development, and the 2008–2009 Economic Crisis. *Structure and Dynamics* 4(1): 3–57. URL: <http://www.escholarship.org/uc/item/9jv108xp>.
- Korotayev, A., Zinkina, J., and Bogevolnov, J. 2011.** Kondratieff Waves in Global Invention Activity (1900–2008). *Technological Forecasting and Social Change* 78: 1280–1284.

- Korotayev, A., Zinkina, J., Bogevolnov, J., and Malkov, A. 2011.** Global Unconditional Convergence among Larger Economies after 1998? *Journal of Globalization Studies* 2(2): 25–62.
- Kuczynski, Th. 1978.** Spectral Analysis and Cluster Analysis as Mathematical Methods for the Periodization of Historical Processes... Kondratieff Cycles – Appearance or Reality? *Proceedings of the Seventh International Economic History Congress*. Vol. 2 (pp. 79–86). Edinburgh: International Economic History Congress.
- Kuczynski, Th. 1982.** Leads and Lags in an Escalation Model of Capitalist Development: Kondratieff Cycles Reconsidered. *Proceedings of the Eighth International Economic History Congress*. Vol. 3. Budapest: International Economic History Congress.
- Kuhn, P. A. 1978.** The Taiping Rebellion. In Twitchett, D., and Fairbank, J. K. (eds.), *The Cambridge History of China*. Vol. 10. *Late Ch'ing, 1800–1911*. Part 1 (pp. 264–317). Cambridge: Cambridge University Press.
- Kuznets, S. 1930.** *Secular Movements in Production and Prices. Their Nature and their Bearing upon Cyclical Fluctuations*. Boston, MA: Houghton Mifflin.
- Kuznets, S. 1958.** Long Swings in the Growth of Population and in Related Economic Variables. *Proceeding of the American Philosophical Society* 102(1): 25–52.
- Lan, V. I. 1975.** *The USA: From the Spanish-American War to World War I*. Moscow: Nauka. In Russian.
- Lan, V. I. 1976.** *The USA: From World War I to World War II*. Moscow: Nauka. In Russian.
- Lan, V. I. 1978.** *The USA in the War and Post-War Period*. Moscow: Nauka. In Russian.
- Larin, V. L. 1986.** *Rebellion of Peoples of Southwestern China in the 1850s – 1870s*. Moscow: Nauka. In Russian.
- Linstone, H. A. 2006.** The Information and Molecular Ages: Will K-Waves Persist? In Devezas, T. C. (ed.), *Kondratieff Waves, Warfare and World Security* (pp. 260–269). Amsterdam: IOS Press.
- Liu Kwang-Ching. 1978.** The Ch'ing Restoration. In Twitchett, D., and Fairbank, J. K. (eds.), *The Cambridge History of China*. Vol. 10. *Late Ch'ing, 1800–1911*. Part 1 (pp. 409–490). Cambridge: Cambridge University Press.
- Lynch, Z. 2004.** Neurotechnology and Society 2010–2060. *Annals of the New York Academy of Sciences* 1031: 229–233.
- Maddison, A. 1995.** *Monitoring the World Economy, 1820–1992*. Paris: OECD.
- Maddison, A. 2001.** *Monitoring the World Economy: A Millennial Perspective*. Paris: OECD.
- Maddison, A. 2003.** *The World Economy: Historical Statistics*. Paris: OECD.
- Maddison, A. 2009.** *World Population, GDP and Per Capita GDP, A.D. 1–2003*. URL: www.ggdc.net/maddison.
- Maddison, A. 2010.** *World Population, GDP and Per Capita GDP, A.D. 1–2008*. URL: www.ggdc.net/maddison.
- Maevski, V. I. 1997.** *Introduction to Evolutionary Macroeconomics*. Moscow: Yaponiya segodnya. In Russian.
- Malakhovskii, K. V. 1971.** *History of the Commonwealth of Australia*. Moscow: Nauka. In Russian.

- Malkov, A. S., Bogevolnov, Yu. V., Khaltourina, D. A., and Korotayev, A. V. 2010.** System Analysis of World Dynamics: Interaction between the Center and the Periphery of the World System. In Akaev, A. A., Korotayev, A. V. , and Malinetsky, G. G. (eds.), *Prognosis and Modeling of Crises and World Dynamics* (pp. 234–248). Moscow: LKI/URSS. *In Russian.*
- Mandel, E. 1975.** *Late Capitalism*. London: New Left Books.
- Mandel, E. 1980.** *Long Waves of Capitalist Development*. Cambridge: Cambridge University Press.
- Marchetti, C. 1980.** Society as a Learning System: Discovery, Invention, and Innovations Cycles Revisited. *Technological Forecast and Social Change* 18: 257–282.
- Marchetti, C. 1986.** Fifty Years Pulsation in Human Affairs. *Futures* 17(3): 376–388.
- Marchetti, C. 1988.** Infrastructures for Movement: Past and Future. In Ausubel, J. H., and Herman, R. (eds.), *Infrastructures for Movement: Past and Future, in Cities and Their Vital Systems* (pp. 146–174). Washington, D.C.: National Academy Press.
- Mendelson, L. A. 1959.** *Theory and History of Economic Crises and Cycles*. Vols 1–2. Moscow: Social and Economic Literature Publishing House. *In Russian.*
- Mensch, G. 1979.** *Stalemate in Technology – Innovations Overcome the Depression*. New York: Ballinger.
- Metz, R. 1992.** Re-Examination of Long Waves in Aggregate Production Series. In Kleinknecht, E., Mandel, A., and Wallerstein, I. (eds.), *New Findings in Long Wave Research* (pp. 80–119). New York: St. Martin's.
- Metz, R. 1998.** Langfristige Wachstumsschwankungen – Trends, Zyklen, Strukturbrüche oder Zufall? In Thomas, H., and Nefiodow, L. A. (eds.), *Kondratieffs Zyklen der Wirtschaft. An der Schwelle neuer Vollbeschäftigung?* (S. 283–307). Herford: BusseSeewald.
- Metz, R. 2006.** Empirical Evidence and Causation of Kondratieff Cycles. In Devezas, T. C. (ed.), *Kondratieff Waves, Warfare and World Security* (pp. 91–99). Amsterdam: IOS Press.
- Modelski, G. 2001.** What Causes K-Waves? *Technological Forecasting and Social Change* 68: 75–80.
- Modelski, G. 2006.** Global Political Evolution, Long Cycles, and K-Waves. In Devezas, T. C. (ed.), *Kondratieff Waves, Warfare and World Security* (pp. 293–302). Amsterdam: IOS Press.
- Modelski, G., and Thompson, W. R. 1996.** *Leading Sectors and World Politics: The Coevolution of Global Politics and Economics*. Columbia, SC: University of South Carolina Press.
- Nefedov, S. A. 2004.** A Model of Demographic Cycles in Traditional Societies: The Case of Ancient China. *Social Evolution and History* 3(1): 69–80.
- Nepomnin, O. E. 2005.** *History of China: The Qing Era. The 17th – the Early 20th Century*. Moscow: Vostochnaya literatura. *In Russian.*
- Pantin, V. I., and Lapkin, V. V. 2006.** *Philosophy of Historical Prognosis: Rhythm of History and Prospects of World Development in the First Half of the 21st Century*. Dubna: Feniks+.
- Papenhausen, Ch. 2008.** Causal Mechanisms of Long Waves. *Futures* 40: 788–794.
- Perez, C. 2011.** *Technological Revolutions and Financial Capital. Dynamics of Bubbles and Periods of Prosperity*. Moscow: Delo. *In Russian.*

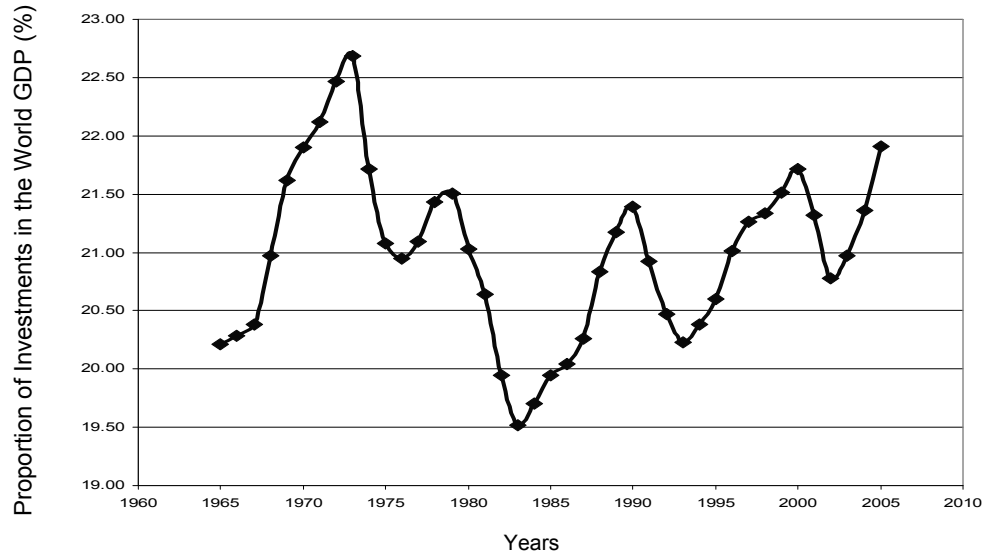
- Perkins, D. H. 1969.** *Agricultural Development in China 1368–1968*. Chicago, IL: Aldine.
- Plakitsin, Yu. A. 2011.** Study of Patent Applications' Dynamics as an Instrument for Analysis of Innovative Development of Energetics. In Akaev, A. A., Korotayev, A. V., Malinetsky, G. G. and Malkov, S. Yu. (eds.), *Projects and Risks of the Future: Concepts, Models, Instruments, Prognosis* (pp. 323–336). Moscow: Krasand. *In Russian*.
- Popov, V. A. 1978.** Some Stabilization of Conservative Government and Growth of Economic Expansion (July 1960–1970). In Popov, V. A. (ed.), *History of Japan (1945–1975)* (pp. 249–1970). Moscow: Nauka. *In Russian*.
- Reuveny, R., and Thompson, W. R. 2001.** Leading Sectors, Lead Economies, and Their Impact on Economic Growth. *Review of International Political Economy* 8: 689–719.
- Reuveny, R., and Thompson, W. R. 2004.** *Growth, Trade and Systemic Leadership*. Ann Arbor, MI: University of Michigan Press.
- Reuveny, R., and Thompson, W. R. 2008.** Uneven Economic Growth and the World Economy's North-South Stratification. *International Studies Quarterly* 52: 579–605.
- Reuveny, R., and Thompson, W. R. 2009.** *Limits to Globalization and North-South Divergence*. London: Routledge.
- Rostow, W. W. 1975.** Kondratieff, Schumpeter and Kuznets: Trend Periods Revisited. *Journal of Economic History* 25(4): 719–753.
- Rostow, W. W. 1978.** *The World Economy: History and Prospect*. Austin, TX: University of Texas Press.
- Sevostyanov, G. N. 1983. (Ed.).** *History of the USA. Vol. 1. 1607–1877*. Moscow: Nauka. *In Russian*.
- Schumpeter, J. A. 1939.** *Business Cycles*. New York: McGraw-Hill.
- Scheglov, S. I. 2009.** Kondratieff Cycles in the 20th Century, Or How Economic Prognoses Come True. URL: <http://schegloff.livejournal.com/242360.html#cutid1>. *In Russian*.
- Senge, P. M. 1982.** *The Economic Long Wave: A Survey of Evidence*. MIT System Dynamics Group working paper. Cambridge, MA: MIT.
- Silberling, N. J. 1943.** *The Dynamics of Business: An Analysis of Trends, Cycles, and Time Relationships in American Economic Activity since 1700 and Their Bearing upon Governmental and Business Policy*. New York: McGraw-Hill.
- Tausch, A. 2006a.** *From the 'Washington' towards a 'Vienna Consensus'? A Quantitative Analysis on Globalization, Development and Global Governance*. Buenos Aires: Centro Argentino de Estudios Internacionales.
- Tausch, A. 2006b.** Global Terrorism and World Political Cycles. In Grinin, L., de Munck, V. C., and Korotayev, A. (eds.), *History and Mathematics: Analyzing and Modeling Global Development* (pp. 99–126). Moscow: KomKniga/URSS.
- Thompson, W. R. 2007.** The Kondratieff Wave as Global Social Process. In Modelski, G., and Denemark, R. A. (eds.), *World System History, Encyclopedia of Life Support Systems, UNESCO*. Oxford: EOLSS Publishers. URL: <http://www.eolss.net>.
- Trakhtenberg, I. A. 1963 [1939].** *Monetary Crisis (1821–1938)*. Moscow: The USSR Academy of Sciences. *In Russian*.
- Tugan-Baranovsky, M. I. 2008 [1913].** *Cyclic Industrial Crises*. Moscow: Directmedia Publishing. *In Russian*.

- Turchin, P. 2003.** *Historical Dynamics: Why States Rise and Fall*. Princeton, NJ: Princeton University Press.
- Turchin, P. 2005a.** Dynamical Feedbacks between Population Growth and Sociopolitical Instability in Agrarian States. *Structure and Dynamics* 1. URL: http://cliodynamics.info/PDF/Turchin_SDEAS_2005a.pdf.
- Turchin, P. 2005b.** *War and Peace and War: Life Cycles of Imperial Nations*. New York: Pi Press.
- Turchin, P., and Korotayev, A. 2006.** Population Density and Warfare: A Reconsideration. *Social Evolution and History* 5(2): 121–158.
- Turchin, P., and Nefedov, S. 2009.** *Secular Cycles*. Princeton, NJ: Princeton University Press.
- Tylecote, A. 1992.** *The Long Wave in the World Economy*. London: Routledge.
- United Nations. 2012.** *Population Division Database*. URL: <http://www.un.org/esa/population>.
- U.S. Bureau of the Census. 2012.** *World Population Information*. URL: <http://www.census.gov/ipc/www/idb/worldpopinfo.php>.
- Wallerstein, I. 1984.** Economic Cycles and Socialist Policies. *Futures* 16(6): 579–585.
- Wolff, S. de. 1924.** Prosperitäts- und Depressionsperioden. In Jentsch, O. (ed.), *Der Lebendige Marxismus* (S. 13–43). Jena: Thüringer Verlagsanstalt.
- World Bank. 2012.** *World Development Indicators Online*. Washington, D.C.: World Bank. URL: <http://data.worldbank.org/indicator>.
- WIPO = World Intellectual Property Organization. 2012a.** *Statistics on Patents. Total Number of Patent Grants by Resident and Non-Resident (1985–2008)*. URL: http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/xls/wipo_pat_grant_total_from_1985.xls.
- WIPO = World Intellectual Property Organization. 2012b.** *Statistics on Patents. Patent Grants by Patent Office by Resident and Non-resident*. URL: http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/xls/wipo_pat_grant_from_1883_table.xls.
- Yakovets, Yu. V. 2001.** *N. D. Kondratieff Heritage: View from the 21st Century*. Moscow: MFK. In Russian.
- Zinn, H. 1995.** *A People's History of the United States. 1492 – Present*. New York: Harper Perennial.
- Zwan, A. van der. 1980.** On the Assessment of the Kondratieff Cycle and Related Issues. In Kuipers, S. K., and Lanjouw, G. J. (eds.), *Prospects of Economic Growth* (pp. 183–222). Amsterdam: North-Holland.

Appendix

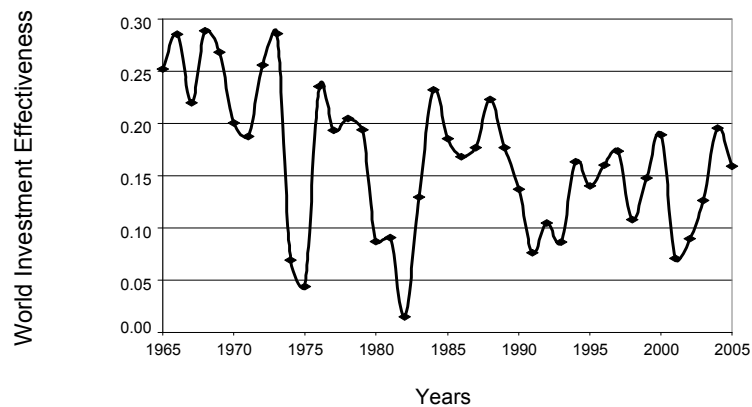
Supplementary Figures

Fig. S1. Dynamics of Proportion of Investments in the World GDP (%), 1965–2005



Source: World Bank 2012.¹⁰

Fig. S2. Dynamics of the World Investment Effectiveness, 1965–2005



Source: World Bank 2009a.¹¹

Note: This variable indicates how many dollars of the world GDP growth are achieved with one dollar of investments.

¹⁰ Dynamics of this variable has been calculated by Justislav Bogevolnov (Moscow State University, Department of Global Studies) with the World Bank database by dividing the world gross fixed capital formation indicator (in constant international 2000 dollars) for a given year by the world GDP (in constant international 2000 dollars) for the same year.

¹¹ Dynamics of this variable has been calculated by Justislav Bogevolnov.

Part II. GLOBAL AND REGIONAL RELATIONS AND PROCESSES

Soft Power as a State's Foreign Policy Resource

Olga G. Leonova

The article examines the 'soft power' concept which is treated as a state's foreign policy resource and a specific tool for latent governance of international processes. The work gives an insight into the content of soft power, its goals and objectives and defines its features. The author explores the content of soft power in a number of European countries, African states as well as in Russia. The article considers the conditions for implementation of Russia's soft power, the objectives to be attained to implement it, and methods to increase its efficiency.

Keywords: *hard power, soft power, foreign policy resource, latent governance, impact, influence, attraction.*

The twenty-first century sees the expanding channels through which a state affects international processes and other countries. Today a country's economic success, ideological persuasiveness, and cultural attractiveness are often more important factors than its military power and possession of nuclear weapons.

It is the hard power that was quite recently considered to be almost the key tool of foreign policy. Hard power, as is well-known, is a policy of coercion resting on a threat of use and/or use of military force against a given country. However, in the globalizing world in the context of global interconnection and interdependence it is no longer effective to use outdated political tools, including nuclear weapons, which may result in a total economic collapse of the country that has initiated a nuclear attack (except for the 'rogue states' that are not included in the global economy). A threat or use of hard power (warships cruising along the coast or planes patrolling sky above a country) is rather ineffective because it entails more negative side effects than potential doubtful gains for the aggressor. This is well exemplified by Libya, Afghanistan and Iraq. In any case it is fraught with serious losses of reputation capital, which may subsequently prove detrimental to quite tangible capital.

Today the global world is gradually fragmented into macroregional systems comprising several countries led by a strong regional power. Possessing simultaneously parameters of economic, political and military poles, such regional systems may well claim the status of global power centers in the future. With such a configuration of the geopolitical space, a potential aggressor should be aware that it will have to deal not with one particular country, but with a whole regional system whose economic, political and military potential can compare with or surpass the aggressor's potential.

Soft Power: Essence, Goals, and Objectives

Soft power is a foreign policy resource and a specific tool of latent governance of international processes, which is brought into focus in the era of globalization.

Latent governance objects are international processes and relations as well as individual countries and regions of the world. Such latent governance has its own distinctive features: firstly, the governance subject's influence is converted into the governance object's action motivation; secondly, there are no formal institutes, methods and levers of governance.

Globalization processes cause the geopolitical space to reformat, a new hierarchical system (poles, power centers and regional powers) to form and new geopolitical axes to emerge. Such conditions make it necessary to shape a foreign policy appropriate to new realities, look for new tools and methods to attain the state's strategic goals and fulfill national interests.

Soft power allows even those countries which have a limited range of traditional influence resources (*e.g.*, states non-members of the UN Security Council, non-nuclear-weapon states or states on the geographic periphery) to latently influence international processes. In the context of a multipolar, polycentric world, any country, regardless of its position in the global hierarchy, can latently influence international processes going on within a given macroregion or even globally, provided that it makes efficient use of soft power tools.

While reasoning on soft power, they tend to refer to Joseph Nye's work (Nye 2004) whose title has not been quite adequately translated into the Russian language. According to Nye's concept, soft power is a derivative from the state's three resources: its culture, political ideology and foreign policy. Our treatment of this term is broader: soft power is a set of *external and internal factors of the state*.

External factors include the following: foreign policy and its authority in international affairs; a state's position in the global hierarchy and its geopolitical status; civilization status (there is national culture in all countries, but not all countries are successors of a specific *civilization*); political and economic development model of a state; state's development strategy and ability to put it into practice; a country's information resources, its communicative mobility and position on the Information superhighway. Internal (sociocultural) factors are represented by the following parameters: ideology, life style, quality and standards, values (including the national ideas); the national mentality; national culture (art, literature, film industry, theatre, show business); the state's creative potential, ability to generate ideas and technologies, including the creative power of a nation. Soft power is where a country's national idea and its mission in the global world are expressed.

In total, these factors contribute to an attractive and effective *image* of a country. However, since complete clarity as to the relationship between the categories of 'image' and 'soft power' remains yet to be achieved, there are two viewpoints on the issue. According to the first one, soft power is a tool to build the image. The second point of view regards the image as one of soft power components. The difference between these categories is that soft power is a strategy of action and the image is something that appears within social interaction as well as in the process of implementing this strategy.

Soft power can also be defined as *an impact by influence*. The essence of soft power is a country's ability to exert influence based on attractiveness and appeal of its image. This is how the essence of soft power is manifested:

- use of intangible assets to realize its interests and implement strategies in the global world;
- a method to achieve the desired result in foreign policy by peaceful means;
- a method for non-violent fulfillment of national interests in the global world.

The possibility to exercise soft power is based on the principles of sympathy, attractiveness, appeal and voluntary participation.

One of the critical tactical *objectives* of soft power is to create attraction, for example, by building an effective image of the country and influencing the governance object. Taking into account the definition suggested above, we can determine the strategic *goal of soft power* as motivating the governance object to act and make a political decision through an impact by influence.

The most important tools of soft power are information flows, political PR intended for foreign audience, global marketing, country's positioning in the global hierarchy, country's language and its rating in the world, people's (public) diplomacy, tourism, sport and cultural exchanges, system of education and student (youth) exchanges, ability to wage media wars, migration policy, national expatriate community, and cultural dialogue. Efficient use of the soft power tools may foster *an illusion* of mutual interest, trust, respect and mutual understanding, and provide possibilities for a given state to influence political and humanitarian processes in the world and particular countries.

There are significant differences between the concepts and practical application of soft power and hard power, a study of which provides a deeper insight into the essence of the category under consideration. In particular, soft power influence methods are voluntary participation of another country in basic foreign policy arrangements of the influenced state and its geopolitical projects, acceptance of common aims and illusion of achieving the common result, as well as intensive communication flows. The hard power methods rest on armed violence (armed intervention), economic pressure, intimidation (military, political, energy, raw materials, food, *etc.*), and bribery of the national political elite.

There is a flexible balance of applying soft power and hard power methods in the modern world. Soft power and hard power use different ways to obtain authority which may vary depending on the country's status. Typically for a rogue state, such influencing methods include a threat of use of force, for a satellite country these are remunerations or economic incentives; and for a partner or ally these are methods from the soft power tool package, that is declaration of common interests and goals and promising to achieve the common result with a 'fair' distribution of preferences.

Soft Power Influence Limits

Soft power has its limits. A natural limiter of soft power impact is the cultural and historic tradition of influence object.

The liberal concept of soft power has its limitations in the non-Western world. Some constituents (as formulated by Nye) of soft power have no effective influence in the Eastern World countries. Due to peculiar political culture of the Eastern countries, some political values of liberal democracy, such as the idea of liberal democracy, human rights and freedom (as treated in the West) are not favored there. However, the idea of charity and social support of vulnerable social strata (constituting the essence of the social state concept) are understood there rather well.

As for consumer preferences, despite the universal diffusion and really global intervention of Coca-Cola, Sneakers, MacDonald's, jeans, innovative devices (mobile phones, iPads, tablet PCs) and technologies (including software), the Eastern society remains the same regarding its culture and essence.

Limiting line of soft power goes along the so-called 'tectonic fault of civilization plates'. Natural limiting factors of soft power are *civilization filters and civilization barriers*.

Civilization barriers select (sort out) economic, political and sociocultural phenomena that are most inauthentic for the civilization matrix of a given country. Civilization barriers operate on the level of national consciousness archetypes and flatly reject (or fail to accept) certain phenomena of economic, political or cultural life invading from outside.

In Russia, such civilization barriers are exemplified by our society not accepting the enforced cult of the strong personality, Lone Ranger and sexual revolution (in Islamic republics) as well as imposed benchmark 'career, money, success' (as shown by social survey data, young people give more preference to family values). The doctrines of free market and monetarism approaches, positioning of such spheres as education and healthcare as a service sector, *etc.* are deemed negatively.

Civilization filters are mechanisms for interpretation and adaptation of exported economic, political and sociocultural phenomena that, although inauthentic for a given civilization matrix, may have certain elements getting in tune with civilization algorithms and may be adopted thereto. Such civilization filters functioning can be exemplified by the special Russian interpretation of the theory and practice of the Western parliamentary system, democracy, presidency institution, election system, party system, banking system, *etc.*

Where the soft power effect ends, political technologies are employed. However, most often soft power and political technologies methods are used simultaneously. In the broad sense soft power is a part of global political technologies. When a controversy arises between the *necessity* and *opportunity* to use soft power, political technologies are also put into play.

National Features of Soft Power

Recently, the political discourse has used the notion of *smart power* interpreted as a balance of hard and soft power. It allows us, therefore, to single out the following governance mechanisms and influence tools intended for international processes, applied in the modern global world: soft power, hard power, smart power and also wise power (that is usually attributed to China). Each country forms its own soft power content determined by political, economic and sociocultural differences between different countries of the world. We suggest that *these national varieties of soft power* should be called dominant power of the USA, attractive power of Europe, wise power of China, sophisticated power of India and mysterious power of the East.

How is Russia's soft power to be denoted? Different options may be offered: reserved, mild, calm, unbending power of Russia. Or probably, an unobvious one? The question remains open.

Russia's soft power

Soft power policy enables Russia to render active those resources of its external influence that may turn out to be more efficient in the modern global world. Today Russia has no coherent concept of soft power, nor clear understanding of this phenomenon. And according to sociological surveys, the image of Russia abroad is mostly negatively stereotyped.

While giving no due attention to soft power as a foreign policy resource, Russia positions itself in the global world as a military pole, drastically increasing its defense budget. Russia possesses nuclear weapons. It ranks second after the USA by sales of its weapons to the third countries. Among our partners one finds Venezuela, Algeria, Egypt, Syria, Azerbaijan, Iran, Indonesia, India, China, and Vietnam. The 2013 national budget provides 2.1 trillion rubles for the National Defense purposes (to be increased to 3 trillion rubles, *i.e.* by one third, by 2015). Over 2 trillion rubles accounts for the National Defense and Law Enforcement Activities. Both items total over 30 per cent of the budget (Argumenty... 2012). Such military reinforcement may compensate Russia's weaker positions in the economic and technological spheres and preserve its image of a strong player.

In order to implement its soft power Russia has to create its logical connection that would comply with Russia's image and mission in the complex multipolar world. This may be a logical connection 'Russia – the guarantor of safety'. The mission of Russia is to guarantee safety and stability in the region, on the continent and in the global world in general, disregarding privations and needs of its own people and sparing no effort and money. Such a mission can be exemplified by Russia's prudent initiatives on Libya, Syria, and Iran *etc.*

Here we can also refer to the thesis saying that Russia is an orthodox country striving to follow Christian commandment: 'Blessed are the peacemakers...'

It is important to emphasize Russia's status as a civilization pole. Parameters of such a pole in the multipolar world are thought to be as follows: definite civilization identity; potential of sociocultural influence; definite particularities of national mentality; identifiable civilization algorithms; civilization filters and barriers in the course of sociocultural integration of the countries in the globalizing world; consolidation based on a uniting national idea shared by all citizens; protection of national interests, values and ideals; assurance of national security; and a coherent national project.

The state's civilization resource is a rather sustainable, almost indestructible and constantly renewing resource available to our country at present. Availability of a set of civilization pole parameters may be converted into soft power.

Notwithstanding the negative stereotype of perceiving its domestic and foreign policy, Russia undoubtedly has some soft power, although in a *latent state*. In addition to conventional elements of cultural influence (Russian ballet, Dostoevsky, Tolstoy, Chekhov, Tchaikovsky, Rachmaninoff, Shostakovich), the concept of Russia's soft power may include the following components: membership in the UN Security Council, energy and raw material resources, dramatic history and great victories, unique fusion of cultures of multi-ethnic Russia, unprecedented experience of interaction and cooperation of peoples of our country and dialogue of confessions, space power status, renowned weapon brands and new military developments, its vast territory and astonishingly beautiful nature.

Positioning Russia as a dynamically developing country, whose leaders are invariably among the world's top influential people, a BRICS member and leading state of the Shanghai Cooperation Organization will undoubtedly increase appeal of Russia's soft power.

References

- Argumenty i Fakty, 2012, No. 43. P. 20. *In Russian*.
 Nye, J. 2004. *Soft Power: The Means to Success in World Politics*. New York: Public Affairs Group.

Multiple Modernities: A Preliminary Inquiry into the Implications of the East Asian Modernity

Tu Weiming

The rise of 'Confucian' East Asia – Japan, the four mini-dragons – suggests that despite global trends defined primarily in economic and geopolitical terms, cultural traditions continue to exert powerful influences in the modernizing process. The claim that Asian values, rather than Western Enlightenment values, are more congenial to current Asian conditions and, by implication, to the emergent global community in the twenty-first century is seriously flawed, if not totally mistaken. The challenge ahead is the need for global civilizational dialogue as a prerequisite for a peaceful world order.

Keywords: *modernity, Eastern values, Confucianism, modernization, humanism.*

Modernity is both a historical phenomenon and a conceptual framework. The idea of multiple modernities is predicated on three interrelated assumptions: the continuous presence of traditions as an active agent in defining the modernizing process, the relevance of non-Western civilizations for the self-understanding of the modern West, and the global significance of local knowledge.

In an exploration of economic culture and moral education in Japan and the four mini-dragons (Taiwan, South Korea, Hong Kong, and Singapore), the continuous relevance of the Confucian traditions in East Asian modernity is studied from cross-cultural and interdisciplinary perspectives. Each geographic area is greatly varied and each disciplinary approach (philosophical, religious, historical, sociological, political, or anthropological) is immensely complex, and the interaction among them layers the picture with ambiguities. A discussion of them together shows that an appreciation of the Confucian elite's articulation and the habits of the heart of the people informed by Confucian values is crucial for understanding the political economy and the moral fabric of industrial East Asia (Tu Weiming 1996).

'Modernization'

Historically the term 'modernization' was employed to replace 'westernization' in recognition of the universal significance of the modernizing process. Although the modernizing process originated in Western Europe, it has so fundamentally transformed the rest of the world that it must be characterized by a concept much broader than geography. Including the temporal dimension in the conception reveals modernization as the unfolding global trend rather than as a geographically specific dynamic of change.

The concept of modernization is relatively new in academic thinking. It was first formulated in North America in the 1950s by sociologists, notably Talcott Parsons, who be-

lieved that the forces unleashed in highly developed societies, such as industrialization and urbanization, would eventually engulf the whole world. Although these forces could be defined as 'westernization' or 'Americanization', in the spirit of ecumenicalism, the more appropriate and perhaps scientifically neutral term would be 'modernization'.

It is interesting to note that, probably under the influence of intellectual discussion in Japan, the Chinese term for 'modernization', *xiandaihua*, was coined in the 1930s in a series of debates to address issues of development strategies, organized by the most influential newspaper in China, *Shenbao*. The three major debates, which centered on whether agriculture or industry, socialism or capitalism, or Chinese culture or Western learning should have priority in China's attempt to catch up with imperialist powers (including Japan), provide a richly textured discourse in modern Chinese intellectual history (Lo Rongqu 1985). Furthermore, a focused investigation of the Chinese case will help determine the applicability of the concept of modernization to non-Western societies.

However, the claim that East Asian modernity is relevant to the modern West's self-understanding is built on the assumptive reason that if the modernizing process can assume cultural forms substantially different from those of Western Europe and North America, it clearly indicates that neither westernization nor Americanization is adequate in characterizing the phenomenon. Furthermore, East Asian forms of modernization may help scholars of modernization develop a more differentiated and subtle appreciation of the modern West as a complex mixture of great possibilities rather than a monolithic entity impregnated with a unilinear trajectory.

If we begin to perceive modernization from multiple civilizational perspectives, the assertion that what the modern West has experienced must be repeated by the rest of the world is no longer believable. Indeed, upon scrutiny, the modern West itself exhibits conflictual and contradictory orientations, a far cry from a coherent model of development. The difference between European and American approaches to modernization broadly defined gives ample evidence to the argument for diversity within the modern West. Actually, three exemplifications of Western modernity – Britain, France, and Germany – are so significantly different from one another in some of the salient features of the modernizing process that, in essence, none of the local knowledge is really generalizable. This by no means undermines the strong impression that virtually all forms of local knowledge that can be generalized, if not universalized, are Western in origin.

Nevertheless, we are at a critical juncture and must move beyond three prevalent but outmoded exclusive dichotomies: the traditional – modern, the West – the rest, and the local – global. Our effort to transcend these dichotomies has far-reaching implications for developing a sophisticated understanding of the dynamic interplay between globalization and localization. The case of East Asia is profoundly meaningful for this kind of inquiry. I will focus my attention on Confucian humanism as the basic value system underlying East Asian political economy. Let us begin with a historical observation.

Whether or not Hegel's philosophy of history signaled a critical turn that relegated Confucianism, together with other spiritual traditions in the non-Western world, to the dawn of the Spirit, the common practice in cultural China of defining the Confucian ethic as 'feudal' is predicated on the strong thesis of historical inevitability implicit in the Hegelian vision. The irony is that the whole Enlightenment project as captured by the epoch-making Kantian question, 'What is Enlightenment?' was actually an affirmation that cultural traditions outside the West, notably Confucian China, had already developed an ordered society even without the benefit of revelatory religion.

As understood by contemporary thinkers such as Jurgen Habermas, what happened in the nineteenth century when the dynamics of the modern West engulfed the world in a rest-

less march toward material progress was definitely not the result of a straightforward working out of the Enlightenment. On the contrary, the perceived Enlightenment trajectory of rationality was thoroughly undermined by the unbound Prometheus, symbolizing an unmitigated quest for complete liberation from the past and thorough mastery of nature. The demand for liberation from all boundaries of authority and dogma may have been a defining characteristic of Enlightenment thinking; the aggressive attitude toward nature is also a constituent part of the Enlightenment mentality. To the rest of the world, the modern West, informed by the Enlightenment mentality, has been characterized by conquest, hegemony, and enslavement as well as by models of human flourishing.

Hegel, Marx, and Weber shared the ethos that, despite all its shortcomings, the modern West was the only arena of progress from which the rest of the world could learn. The unfolding of the Spirit, the process of historical inevitability, or the 'iron cage' of modernity, was essentially a European *Problematik*. Confucian East Asia, the Islamic Middle East, Hindu India, and Buddhist Southeast Asia were on the receiving end of this process. Eventually, modernization as homogenization would make cultural diversity inoperative, if not totally meaningless. It was inconceivable that Confucianism, or for that matter any other non-Western spiritual traditions, could exert a shaping influence on the modernizing process. The development from traditional to modern was irreversible and inevitable.

In the global context, what some of the most brilliant minds in the modern West assumed to be self-evidently true turned out to be parochial. In the rest of the world, and definitely in Western Europe and North America, the anticipated clear transition from tradition to modernity never occurred. As a norm, traditions continue to exert their presence as active agents in shaping distinctive forms of modernity, and, by implication, the modernizing process itself has continuously assumed a variety of cultural forms rooted in specific traditions. The recognition of the relevance of radical otherness to one's own self-understanding of the eighteenth century seems more applicable to the current situation in the global community than the inattention to any challenges to the modern Western mindset of the nineteenth century and most of the twentieth century. In the twenty-first century, the openness of the eighteenth century as contrasted with the exclusivity of the nineteenth and twentieth centuries may provide a better guide for the dialogue of civilizations.

The current debate between the 'end of history' (Fukuyama 1992) and the 'clash of civilizations' (Huntington 1996) scratches only the surface of the *Problematik* I wish to explore. The euphoria produced by the triumph of capitalism and the expectation that the liberal democratic persuasion will be universally accepted is shortlived. The emergence of the 'global village', at best an imagined community, symbolizes difference, differentiation, and outright discrimination. The hope that economic globalization engenders equality, either of consequence or opportunity, is simple-minded. The world has never been so divided in terms of wealth, power, and accessibility to information and knowledge. Social disintegration at all levels, from family to nation, is a serious concern throughout the world. Even if liberal democracy as an ideal is widely accepted as a universal aspiration by the rest of the world, the claim that it will automatically become the only dominant discourse in international politics is wishful thinking.

Although the 'clash of civilizations' is based on the sound judgment that cultural pluralism is an enduring feature of the global scene, it is still rooted in the obsolete notion of pitting the West against the rest of the world. The credible proposition that only Western forms of local knowledge are generalizable, even universalizable notwithstanding, the thesis of Western exceptionalism is defensible. If the 'clash of civilizations' is a strategy of enhancing the persuasive power of cherished Western values, its goal, in the last analysis, is

comparable to the 'end of history', except for the cautionary note that, as a process, the initial stage may be wearisome for the advocates of Western liberal democracy.

In a deeper sense, neither the end of history nor the clash of civilizations captures the profound concern of modern Western intellectuals. Despite all of the ambiguities of the Enlightenment project, its continuation is both necessary and desirable for human flourishing. The anticipated fruitful interchange between Habermas' communicative rationality and John Rawls' political liberalism is, perhaps, the most promising sign of this endeavor. The challenges to this mode of thinking indiscriminately labeled as postmodernism are formidable, but this is not the place to elaborate on them. Suffice it now to mention that ecological consciousness, feminist sensitivity, religious pluralism, and communitarian ethics all strongly suggest the centrality of nature and spirituality in human reflexivity. The inability of our contemporary Enlightenment thinkers to take seriously the ultimate concerns and harmony with nature as constitutive parts of their philosophizing is the main reason for them to respond creatively to postmodern critique. Lurking behind the scene is the question of community. We urgently need a global perspective on the human condition that is predicated on our willingness to think in terms of global community.

Among the Enlightenment values advocated by the French Revolution, fraternity – the functional equivalent of community – has received scant attention among modern political theorists. The preoccupation with establishing the relationship between the individual and the state since Locke's treatises on government is of course not the full picture of modern political thought, but it is undeniable that communities, notably the family, have been relegated to the background as insignificant in the mainstream of Western political discourse. Georg Hegel's fascination with the 'civil society' beyond the family and below the state was mainly prompted by the dynamics of the bourgeoisie, a distinct urban phenomenon threatening to all traditional communities. It was a prophetic gaze into the future rather than a critical analysis of the value of community. The transition from *gemeinschaft* to *gesellschaft* was thought to have been such a rupture that Max Weber referred to 'universal brotherhood' as an outmoded medieval myth unrealizable in the disenchanted modern secular world. In political and ethical terms, strenuous effort is required for the family of nations to rise above the rhetoric of self-interest to recapture the cosmopolitan spirit of interdependence.

The upsurge of interest in recent decades within North America regarding community may have been stimulated by a sense of crisis that social disintegration is a serious threat to the well-being of the republic, but the local conditions in the United States and Canada, precipitated by ethnic and linguistic conflicts, are visible throughout the highly industrialized, if not postmodern, First World. The conflict between globalizing trends, including trade, finance, information, migration, and disease, and localism, rooted in ethnicity, language, land, class, age, and faith, is not easily resolvable. We are compelled by brutal confrontations as well as encouraging reconciliation around the world to transcend the 'either-or' epistemology and to perceive the imagined global community in a variety of colors and many shades of meaning. The case of East Asian modernity from a Confucian perspective helps us cultivate a new way of thinking.

Confucian Humanism

The revival of Confucian teaching as political ideology, intellectual discourse, merchant ethics, family values, or the spirit of protest in industrial East Asia since the 1960s and socialist East Asia more recently is the combination of many factors. Despite tension and conflict rooted in primordial ties (particularly ethnicity, language, cultural national-

ism, and life orientation), the overall pattern in East Asia is an integration based on values significantly different from the Enlightenment mentality of the modern West.

East Asian intellectuals have been the devoted students of Western learning for more than a century. In the case of Japan the samurai-bureaucrats learned the superior knowledge of Western science, technology, manufacturing industries, and political institutions from the Dutch, British, French, Germans, and, in recent decades, Americans. In similar fashion, the Chinese scholar-officials, the Korean 'forest intellectuals', and Vietnamese *literati* acquired knowledge from the West to build their modern societies. Their commitment to substantial, comprehensive, or even wholesale westernization enabled them to thoroughly transform their economy, polity, and society according to what they perceived, through firsthand experience, as the superior *modus operandi* of the modern way.

This positive identification with the West and active participation in a fundamental restructuring of one's own world according to the Western model is unprecedented in human history. However, East Asia's deliberate effort to relegate its own rich spiritual resources to the background for the sake of massive cultural absorption enhanced the need to appeal to the native pattern to reshape what they had learned from the West. This model of creative adaptation following the end of the Second World War helped them to strategically position themselves in forging a new synthesis.

The Confucian tradition, having been marginalized as a distant echo of the feudal past, is forever severed from its imperial institutional base, but it has kept its grounding in an agriculture-based economy, family-centered social structure, and paternalistic polity that are reconfigured in a new constellation. Confucian political ideology has been operative in the development states of Japan and the four mini-dragons. It is also evident in the political processes of the People's Republic of China, North Korea, and Vietnam. As the demarcation between capitalist and socialist East Asia begins to blur, the cultural form that cuts across the great divide becomes distinctively Confucian in character.

Economic culture, family values, and merchant ethics in East Asia and cultural China have also expressed themselves in Confucian terms. It is too facile to explain these phenomena as a postmodern justification. Even if we agree that the Confucian articulation is but an afterthought, the circulation of terms such as network capitalism, soft authoritarianism, group spirit, consensus formation, and human relatedness in characterizing salient features of the East Asian economy, polity, and society suggests, among other things, the transformative potential of Confucian traditions in East Asian modernity.

Specifically, East Asian modernity under the influence of Confucian traditions suggests a coherent vision for governance and leadership:

- Government leadership in a market economy is not only necessary but also desirable. The doctrine that government is a necessary evil and that the market in itself can provide an 'invisible hand' for ordering society is antithetical to modern experience, West or East. A government that is responsive to public needs, responsible for the welfare of the people, and accountable to society at large is vitally important for the creation and maintenance of order.

- Although law is essential as the minimum requirement for social stability, 'organic solidarity' can only result from the implementation of humane rites of interaction. The civilized mode of conduct can never be communicated through coercion. Exemplary teaching as a standard of inspiration invites voluntary participation. Law alone cannot generate a sense of shame to guide civilized behavior. It is the ritual act that encourages people to live up to their own aspirations.

- Family, as the basic unit of society, is the locus from which the core values are transmitted. The dyadic relationships within the family, differentiated by age, gender, authority, status, and hierarchy, provide a richly textured natural environment for learning the proper way of being human. The principle of reciprocity as a two-way traffic of human interaction defines all forms of human relatedness in the family. Age and gender, potentially two of the most serious gaps in the primordial environment of the human habitat, are brought into a continuous flow of intimate sentiments of human care.

- Civil society does not flourish because it is an autonomous arena above the family and beyond the state. Its inner strength lies in its dynamic interplay between family and state. The image of the family as a microcosm of the state and the ideal of the state as an enlargement of the family indicate that family stability is vitally important for the political body, and that a vitally important function of the state is to ensure organic solidarity of the family. Civil society provides a variety of mediating cultural institutions that allow a fruitful articulation between family and state. The dynamic interplay between the private and public enables the civil society to offer diverse and enriching resources for human flourishing.

- Education ought to be the civil religion of society. The primary purpose of education is character building. Intent on the cultivation of the full person, school should emphasize ethical as well as cognitive intelligence. Schools should teach the art of accumulating 'social capital' through communication. In addition to the acquisition of knowledge and skills, schooling must be congenial to the development of cultural competence and the appreciation of spiritual values.

- Since self-cultivation is the root for the regulation of family, governance of state, and peace under heaven, the quality of life of a particular society depends on the level of self-cultivation of its members. A society that encourages self-cultivation as a necessary condition for human flourishing is a society that cherishes virtue-centered political leadership, mutual exhortation as a communal way of self-realization, the value of the family as the proper home for learning to be human, civility as the normal pattern of human interaction, and education as character building.

Confucianism and Modernization

It is far-fetched to suggest that these societal ideals are fully realized in East Asia. Actually, East Asian societies often exhibit behaviors and attitudes just the opposite of the supposed salient features of Confucian modernity. Indeed, having been humiliated by imperialism and colonialism for decades, East Asia now, on the surface at least, blatantly displays some of the most negative aspects of Western modernism with a vengeance: exploitation, mercantilism, consumerism, materialism, greed, egoism, and brutal competitiveness. Nevertheless, as the first non-Western region to become modernized, the cultural implications of the rise of 'Confucian' East Asia are far-reaching.

The modern West as informed by Enlightenment mentality provided the initial impetus for worldwide social transformation. The historical reasons that prompted the modernizing process in Western Europe and North America are not necessarily structural components of modernity. Surely, Enlightenment values such as instrumental rationality, liberty, rights consciousness, due process of law, privacy, and individualism are all universalizable modern values, but as the Confucian example suggests, 'Asian values' such as sympathy, distributive justice, duty consciousness, ritual, public-spiritedness, and group orientation are also universalizable modern values (see Bary 1998; Langguth 2003; Elgin 2010). Just

as the former ought to be incorporated into East Asian modernity, the latter may turn out to be a critical and timely reference for the American way of life.

If Confucian modernity definitively refutes the strong claim that modernization is, in essence, westernization or Americanization, does this mean that the rise of East Asia, which augurs the advent of a Pacific century, symbolizes the replacement of an old paradigm by a new one? The answer is definitely in the negative. The idea of a kind of reverse convergence, meaning that the time is ripe for Western Europe and North America to look toward East Asia for guidance, is ill-advised. Although the need for the West, especially the United States, to transform itself into a learning as well as a teaching civilization is obvious, what East Asian modernity signifies is pluralism rather than alternative monism.

The success of Confucian East Asia in becoming fully modernized without being thoroughly westernized clearly indicates that modernization may assume different cultural forms. It is thus conceivable that Southeast Asia may become modernized in its own right, without being either westernized or East-Asianized. The very fact that Confucian East Asia has provided an inspiration for Thailand, Malaysia, and Indonesia to modernize signifies that Buddhist and Islamic and, by implication, Hindu forms of modernity are not only possible but highly probable. There is no reason to doubt that Latin America, Central Asia, Africa, and indigenous traditions throughout the world all have the potential to develop their own alternatives to Western modernism.

But this neat conclusion, resulting from a commitment to pluralism, may have been reached prematurely. Any indication that this is likely to happen, a sort of historical inevitability, smacks of wishful thinking. We do not have to be tough-minded realists to recognize the likelihood of this scenario occurring. If the First World insists on its right to overdevelop, if industrial East Asia forges ahead with its accelerated growth, if the People's Republic of China immerses itself in the 'four modernizations' at all costs, what shape will the world be in fifty years from now? Is East Asian modernity a promise or a nightmare? One wonders.

The current financial crisis notwithstanding, the surge in the last four decades of Confucian East Asia – the most vibrant economy the world has ever witnessed – has far-reaching geopolitical implications. Japan's transformation from an obedient student under American tutelage to the single most powerful challenger to American economic supremacy compels us to examine the global significance of this particular local knowledge. The 'reform and open' policy of the People's Republic of China since 1979 has propelled it to become a gigantic development state.

Although the collapse of the Berlin Wall and the disintegration of the former Soviet Union signaled the end of international communism as a totalitarian experiment, socialist East Asia (mainland China, North Korea, and, for cultural reasons, Vietnam) seems to be in the process of reinventing itself in reality, if not in name. With thousands of political dissidents in the West and a worldwide network in support of Tibet's independence, China's radical otherness is widely perceived in the American mass media as a threat. It seems self-evident that since China has been humiliated by the imperialist West for more than a century, revenge may be China's principal motivation for restructuring world order. Memories of the Pacific theater of the Second World War and the Korean War, not to mention the Vietnam War, give credence to the myth of the Yellow Peril. The emigration of wealthy Chinese from Southeast Asia, Taiwan, and Hong Kong to North America, Australia, and New Zealand further enhances the sense of crisis that there is a Chinese conspiracy to rearrange power relationships in the global community.

The rise of 'Confucian' East Asia – Japan, the four mini-dragons, mainland China, Vietnam, and possibly North Korea – suggests that despite global trends defined primarily in economic and geopolitical terms, cultural traditions continue to exert powerful influences in the modernizing process. Although modernization originated from the West, East Asian modernization has already assumed cultural forms so significantly different from those in Western Europe and North America that, empirically, we must entertain alternatives to Western modernism. However, this does not indicate that Western modernism is being eroded, let alone replaced, by East Asian modernism. The claim that Asian values, rather than Western Enlightenment values, are more congenial to current Asian conditions and, by implication, to the emergent global community in the twenty-first century is seriously flawed, if not totally mistaken. The challenge ahead is the need for global civilizational dialogue as a prerequisite for a peaceful world order. The perceived clash of civilizations makes the dialogue imperative.

The paradox, then, is our willingness and courage to understand radical otherness as a necessary step toward self-understanding. If the West takes East Asian modernity as a reference, it will begin to sharpen its vision of the strengths and weaknesses of its model for the rest of the world. The heightened self-reflexivity of the modern West will enable it to appreciate how primordial ties rooted in concrete living communities have helped to shape different configurations of the modern experience.

This is a giant step toward true communication between the West and the rest, without which basic trust and fruitful mutuality across civilizational lines can never be established. Actually, from the perspective of the global community, the dichotomy of the West and the rest is unnecessary and undesirable. It is also empirically untenable. The West, as a hegemonic power, has been trying to dominate the rest by coercion, and the rest has fully penetrated the West as a result of multiple migration: labor, capital, talent, and religion. The time is ripe for a dialogue of civilizations based on the spirit of interdependence.

References

- Bary, W. T. de. 1998.** *Asian Values and Human Rights: A Confucian Communitarian Perspective*. Cambridge: Harvard University Press.
- Elgin M. 2010.** *Asian Values. A New Model for Development?* URL: http://www.stanford.edu/group/sjeaa/journal102/10-2_12%20SeA-Elgin.pdf.
- Fukuyama, F. 1992.** *The End of History and the Last Man*. New York: Free Press.
- Huntington, S. 1996.** *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster.
- Langguth G. 2003.** Asian Values Revisited. *Asia Europe Journal* 1(1): 25–42.
- Lo Rongqu 1985. (Ed.).** *Xihua yu xiandaihua. Westernization and Modernization*. Beijing: Beijing University Press.
- Tu Weiming 1996. (Ed.).** *Confucian Traditions in East Asian Modernity: Moral Education and Economic Culture in Japan and the Four Mini-Dragons*. Cambridge: Harvard University Press.

The Relation between Democracy and Human Rights

Peter G. Kirchsclaeger

The complex relationship between democracy and human rights shows the need for education in democracy which overcomes the reductionist understanding of democracy to recognize only the will of the majority, the need for human rights education. Human rights education is the essential fundament of the implementation of human rights as every human being needs to know about her/his rights. Human rights education is a 'must have' and not a 'nice to have' in today's pluralistic society where human rights enable us to live in peaceful coexistence with respect for the human dignity of each other and with tolerance across the boundaries of traditions, cultures, religions, world views and opinions.

Keywords: human fights, minority, democracy, human rights education, decision-making process.

Introduction

Having a Swiss passport as well as living and working in Switzerland, I start my reflection with the following concrete case from Switzerland which serves as a starting point for a critical reflection: on November 29, 2009, Swiss voters have supported a referendum proposal to ban the building of minarets. More than 57 per cent of electors voted in favor of the ban. In an official statement, the government said it accepted the decision. It stated: 'The Federal Council (government) respects this decision. Consequently the construction of new minarets in Switzerland is no longer permitted' (SWI 2009). The result of a democratic opinion-building and decision-making process – in this case to ban the building of minarets – is violating human rights, in this case the ban violates the freedom of religion and is discriminatory.

What does happen when a democratic decision constitutes a human rights violation? How should the reaction look like when a majority's decision discriminates a minority (e.g., when Swiss majority votes against minaret construction)? Is there a democracy without human rights? These questions gain more importance everyday as we live in a heterogenic society with a variety of values and goals. The demographic development of today's society, the prognoses of migration and the overall perspective of the development of world population indicate that the heterogeneity will intensify and a qualitative handling of it will be a key criterion of the human quality and of the living conditions of next generations. Could this handling be the result of democratic processes? Are human rights the minimal standards to enable the coexistence of a society? Does a direct democracy need a human

rights-based, juridical institution protecting the minorities from a dictatorship of the majority? Does the universality of human rights, on the other hand, lead to a neglect of democratic decisions and a disrespect of national sovereignty in a globalized world? In my paper I will address these and related questions discussing the relation between democracy and human rights based on the observation of the challenge that a majority can vote in a democratic process in favor of a law which is discriminating a minority. I will elaborate the argument that the idea and concept of democracy includes human rights as democracy is built on the fundament of human rights, and I will discuss the concrete consequences of a holistic understanding of democracy.

Human Rights Protect Every Human Being

Human rights protect the essential elements and areas of a human existence, which are necessary for survival and for life as a human being. Human rights are those rights that belong to everyone as a member of the human race, regardless of skin color, nationality, political convictions or religious persuasion, social standing, gender or age. Every individual possesses human rights. They are subjective rights because the right-holders of human rights are individuals, not collectivities. Human rights are rights with a certain complexity because they are at the same time moral, legal, and political rights. In their legal dimension, human rights are part of a legal system and individuals living in this legal system are entitled to these rights. They are 'legal entitlements of individuals against the state or state-like entities, guaranteed by international law for the purpose of protecting fundamental needs of the human person and his/her dignity in times of peace and war' (Kaelin 2004: 17). The legal dimension of human rights is a positive achievement of human history as the international community found a consensus in the Universal Declaration of Human Rights of 1948 and created and ratified a human rights system in subsequent years. One can see a progress in the tradition of human rights from philosophical ideas of human rights (*e.g.*, in the period of Enlightenment) to the implementation of the philosophical ideas of human rights on a national level (*e.g.*, Declaration of Independence of 1776, Declaration des droits de l'homme et du citoyen de 1789) with its obvious limits (only white men of a certain socio-economic class excluding other human beings, excluding all other men and women, and still not overcoming the theory and practice of slavery), initiating the implementation of human rights on a universal level (Universal Declaration of Human Rights of 1948, the UN human rights treaty body system, regional human rights mechanisms) (Bobbio 1998). One can see a progress which the tradition of human rights experienced in the legal dimension in their process of realization. Human rights are now legally defined, know a legal framework and are enforceable. Institutions like the UN Human Rights Council in Geneva, the UN Treaty Body System, ... are elements of the realization of the idea of human rights and can enhance the fulfillment of human rights. They show that human rights are a concrete *reality*, not an illusion. Human rights are legal reality in all parts of the world. Human rights legal mechanisms, instruments and human rights institutions give the idea of the protection of human dignity embodied in human rights.

Human rights gain weight and power when they become part of a particular legal system (see Lohmann 2002), for example, of a national legal system through a democratic process, as they are then enforceable by law more directly and democratically legitimated.

Obviously the implementation of human rights at the same time faces challenges everywhere. One of the main challenges belongs to the process of the incorporation of human

rights in national legal systems: the risk of a particularization of human rights. Human rights are integrated in a national legal system by becoming part of the fundamental rights of the constitution through a democratic process. Within the national legal system the legal subjects acknowledge each other as holders of these rights within the framework of internal logic of a legal system. At the same time this way undermines the universality of human rights, because then human rights would exist only within a particular legal system of a particular legal society. Human beings who are not citizens of this particular legal society remain without human rights. Human rights run the risk of reduction of their universality through the particularization as parts of a national legal system. Justification models within the moral dimension can as already mentioned include the essential aspect of human rights that every human being – even living in a place on the planet where she or he does not benefit from a legal system respecting human rights – has human rights.

On a practical level, the process of strengthening international law and of a global institutionalization of the implementation and protection of human rights – in parallel to the integration of human rights within national legal systems – is necessary.

The legal dimension of human rights introduced above is the result of one part of the political dimension of human rights (see Kirchschlaeger 2013b: 255–260) including the political deliberation, political struggle, political opinion- and consensus-building processes, and political decisions leading to the legal entitlement of human beings to human rights. The political dimension of human rights embraces human rights as content and political arguments in public political discussion as well. Even if they do not lead to legal consequences, they can have political significance.

Furthermore political opinion-building and decision-making processes can strive for human rights, as their aim is to guarantee every human being the enjoyment of human rights. These processes can be dominated by the political duty to take the adequate political measures and decisions to further the implementation of human rights.

Beyond that, the political instrumentalization and the abuse of human rights for other political ends belong to the political dimension of human rights. They can find their worse form when these ends represent themselves violations of human rights.

From a procedural point of view, the human rights serve as a basis for a political opinion-building and decision-making process allowing every human being political participation. I will argue below that human rights protect democratic processes.

Finally, the political discourse and decisions could orient themselves at the frame of reference of human rights.

I just mentioned above that the political process leading from the idea and concept of human rights to the establishment of human rights is one aspect of the political dimension of human rights. This point makes obvious the historical dimension of human rights. This development of human rights happens in human history. If one looks closer at this aspect of the historical dimension of human rights, one can see that usually experiences of injustices trigger a common feeling that humanity should stop these injustices, get rid of them, and avoid them in the future. For example, the Universal Declaration of Human Rights of 1948 can be understood as a reaction to the violation of essential elements and areas of human existence and to the attempt of denial of human dignity during the Holocaust. Johannes Morsink argues: ‘Most of the articles and rights in the Declaration were adopted as direct and immediate reactions to the horrors of the Holocaust’ (2010: 27). This historical dimension of human rights does neither exclude a dynamic understanding of

human rights, which remains open for further development if necessary. On the contrary, taking the historicity of human rights seriously opens the eyes for similar injustices and calls for support of reactions to injustices leading to the claim for human rights. 'The human rights abuses on the minds of the 1948 drafters occurred during the Holocaust, while today we can point not only to the Nazi atrocities, but to atrocities in Bosnia, Cambodia, Rwanda, Darfur and in other contexts' (Morsink 2010: 36). Nor this historical dimension of human rights leads to the end of the universality of human rights due to their historical contingency, because the historical location and explanation of the genesis of human rights explain historic injustices in their exemplary character without any potential for a moral justification of human rights. The analysis of the historical development of human rights brings an added value to the human rights discourse, as it discovers lines of argumentation and processes from a historical perspective which opens valuable systematic insights. While in the historic dimension of human rights the question of the 'how' regarding the genesis of human rights is addressed, the question of the 'why' every human being is entitled to human rights remains open.

It is part of the moral dimension of human rights to address the question of the 'why'. The discourse about the reasons why every human being is a right-holder is of significance, because human rights did not 'fall from heaven'. Human rights are not an 'absolute truth'. The necessity of a justification of human rights is also provoked by the relation between human rights and corresponding duties: every human being is not only a right-holder but also needs to respect the human rights of others. In order to remain coherent with their own idea, the existence of human rights depends exclusively on the possibility of their justification (Alexy 1998). Human rights need to be justified to everyone concerned with human rights.

Besides 'internal necessity', there is an 'external necessity' as well: a reflection of the justification of human rights is also provoked by the different forms of relativism which human rights are facing today. Human rights and their essential claim of universality are doubted in the actual philosophical discussion about human rights after Georg Lohmann in three ways:

1. A cultural-relativistic way;
2. A specific cultural-relativistic way which sees in the particular and partial emphasis of the individual freedom-rights a contradiction of the claim of universality of human rights;
3. A critical relativism based on skepticism related to the small potential of realization of human rights and differences within the realization between the three categories of human rights. These cultural-relativistic criticisms on human rights and related theoretical approaches and reactions, and alternatives to those approaches must be discussed accurately to establish a human rights culture.

One possible approach of justifying human rights is based on the principle of vulnerability which I have developed more extensively on another occasion (Kirchschlaeger 2013a), and which I mention here only shortly and so far as it serves the main focus of the article. The principle of vulnerability means that one is exposed to the possibility to be attacked or hurt physically or mentally including the incapability to liberate oneself from vulnerability. A human being perceives all other human beings and her/his living context and world as possible sources of her/his vulnerability. A human being depends upon herself/himself, other human beings, the context and the world, as all of them can activate

her/his vulnerability or protect her/him from it. The awareness of one's own vulnerability which is based on self-awareness and independent of the empirical correctness of this self-perception, leads to uncertainty as it can also mean 'loss of opportunities to live better, loss of abilities to live well, and, at its extreme, loss of living' (Hoffmaster 2006: 42). Because of this awareness, human beings are willing to build social institutions in order to protect themselves from their own vulnerability. They find a consensus to protect themselves and all human beings from the possible consequences of their vulnerability regarding the essential elements and areas of human existence through human rights. The latter represent the filter to distinguish between vulnerabilities that are relevant for the protection of human rights as the highest possible protection available to the human community and those that are not. Finally, I would like to point out that human rights are not justified by vulnerability itself – this would signify a naturalistic fallacy – but by the reaction to the perception of the principle of vulnerability by human beings.

Human rights in their moral dimension are universal (every human being is a right-holder), categorical (every human being has these rights, they cannot be denied to anyone), egalitarian (every human being has the same rights), individual (human rights apply to every human being as individual and protect the latter from violations by a collectivity, recognizing at the same time the important role of a collectivity for the individual), fundamental (human rights protect basic and essential elements of human existence) and indivisible (the whole catalogue of human rights must be respected, they are complementary), and they make legitimate demands with corresponding positive and negative duties (see Kirchsclaeger 2007).

On the one hand human rights in their moral dimension are 'weak rights', because they are not enforceable but appellative, and the consequences of their violations are moral sanctions (like public shame) but not legal sanctions. On the other hand, human rights in their legal dimension depend in their justification on the moral dimension of human rights, because their legal justification is mostly limited to the boundaries of a national legal system which can be compensated by the moral dimension of human rights.

Vice versa, human rights in their legal dimension cannot justify human rights in their moral dimension, due to the limited validity of the first. Therefore human rights in their moral dimension need to find their justification in the moral dimension. Therefore at the end of the day, the justification of human rights can be realized legitimately only in the moral dimension. They depend on a moral justification.

The significance of the moral dimension of human rights is built on this necessity, as human rights can only be claimed without any limits when there is a justification of human rights independent from legal or political decisions by state actors. This justification must be a moral justification, because it must be convincing for every human being, that is to say, it needs to be a universal moral justification which legitimates the concept that all human beings are equal and holders of human rights.

In addition, the moral dimension of human rights creates an awareness of the constant challenge of a legal and a political reality which neither realizes nor respects human rights completely. This awareness includes the corresponding moral obligation and responsibility of everyone to enhance the implementation of the human rights of every individual in his or her sphere of influence. The theory leads to practice...

Human rights practice needs this theoretical fundament:

Human rights are a theory-based social construct. Human rights practice is commonly understood as actions through which we advocate for the protection of human rights [...] Social action and behaviour which actually do respect human rights, through which we promote their protection, protest against their violation, and organise action or establish institutions that realise and protect human rights, remain guided by theoretical considerations. Indeed, the theory must not become an end in itself; there is something like a prohibition of self-gratification for human rights theory. However, a practice that renounces theoretical considerations will, like similar practices, become blind and runs the risk of getting lost or doing something wrong (Lohmann 2004: 307; translation mine – P.K.).

Finally, the following five situations illustrate the necessity of understanding human rights in their moral dimension and not only in their legal, political and historical dimension. In these exemplary situations human rights could not be claimed at all, or at least not integrally, if their moral dimension were not considered:

- In a state in which human rights cannot be claimed legally, every human being is still a holder of human rights independently of the official position of the state. The understanding of human rights as pre-state-rights (which means before becoming legal positive rights respectively therefore in their moral dimension) needs to be upheld. ‘Pre’ refers here to the validity of human rights, not the genesis, therefore they are not depending upon the state (Sandkuehler 2010: 1539). If human rights were not understood with a moral dimension including its pre-state origin, human rights could not be claimed at all or at least not integrally.

- Where theoretical and practical obstacles block or obstruct the implementation of human rights, or where the political will favors human rights violations, every human being is still a holder of human rights based on the moral dimension of human rights.

- If majority-decisions try to reduce the rights of a minority, every human being is still a holder of human rights which means the protection of the minority and its members in their essential elements and areas of human existence.

- When certain currents in traditions, cultures, religions and world-views interpret human rights in a way denying or restricting a right or some rights to some human beings (*e.g.*, the equality of woman and man, the relation between individual and collective rights, *etc.*), every human being is a holder of human rights and (on the fundament of the above-mentioned principle of indivisibility) of the entire catalogue of human rights to the same extent without any difference.

- If human rights would only be understood in a horizontal way with negative consequences from a human rights perspective regarding the human rights violations by non-state actors and the responsibilities corresponding with human rights of non-state actors, the recognition of every human being as a holder of human rights in their moral dimension ensures that human rights can be applied in horizontal (between individuals) and vertical (between individual and state) relations with a critical potential.

The Universality of Human Rights

The universality of human rights (see Kirchschlaeger 2011) shows the significance of the moral dimension of human rights as background of the just mentioned exemplary five situations. Universality is mentioned above as one of the essential characteristics of human rights. By definition, human rights are rights that apply to all human beings and are therefore universal. All human beings are holders of human rights, independently of what they

do, where they come from, where they live and from their national citizenship, their community...

The universality of human rights is constantly challenged by particular interests, for example, by states which claim the priority of their sovereignty or alleged democratic decisions over the universality of human rights or by the private sector which claims self-regulating approaches and uses this to define its sphere of influence within certain limits. These challenges are part of the political and legal dimension of human rights and as a consequence of the moral dimension of human rights as well. One can recognize a positive tendency to acceptance of human rights by states, a growth of an international institutionalization for the protection of human rights and a progress of the mechanisms for monitoring human rights performances by states to respect the universality of human rights and some small steps by the corporate world. At the same time, it has to be stated that the implementation of human rights is not yet there where it should be, and that the vast majority of human beings are still victims of violations of their human rights. The universality is still a claim, not a reality.

Furthermore, cultural diversity can be seen as an obstacle for the universality of human rights in the moral dimension of human rights. In spite of the different philosophical, religious, cultural and traditional sources and texts transmitting elements of the concept of human rights, although the broad inclusion of the international community in the drafting process of the Universal Declaration of Human Rights and the reconfirmation of the validity of the universality of human rights by the UN Conference in Vienna (1993), the universality faces criticisms from different sides because of its alleged Western origin, for example, in the so-called 'Asian values debate' (see Senghaas 1995; Geiger and Kieserling 2001; Burke 1987).

The fact that the universality of human rights is challenged by cultural diversity is even more astonishing as firstly human rights protect the individual's freedom of religion and belief and the right to a cultural life (article 18 and 27 of the Universal Declaration of Human Rights of 1948) and therefore are enhancing cultural diversity. Secondly human rights as individual rights protect especially the members of minorities from violations and injustices by majorities, for example, with the right to equality, right to non-discrimination, *etc.* Simone Zurbuchen points out: 'While I do not deny that human rights establish moral boundaries, it needs also to be seen that these rights enable members of religious communities and of other variants of cultural groups to maintain their distinct identity' (Zurbuchen 2009: 285). Often religious, cultural, traditional or world-view communities run the risk to be discriminated because of their religion, culture, tradition or world-view, and human rights protect them from this risk; thus religions, cultures, traditions, world views and beliefs benefit indirectly from the universality of human rights as they can find themselves somewhere in the world in the situation of a minority. Minorities benefit as well indirectly from the human right to freedom of religion and belief. This right enables and enhances the authentic practice of an individual and through that also the peaceful coexistence of religions, cultures, traditions and world-views, as well as the dialogue between them. It is an achievement of humanity that it seeks to protect this variety. As the fundament of protection of ideas, traditions and beliefs, human rights can therefore in exchange expect to be respected by religions, cultures, traditions, world views and beliefs (see Hoeffe 1999). Actually the realization of human rights needs the support and contribution by societal actors like religious, cultural, traditional or world-view communities (Kirchschlaeger 2013a, 2013b).

At this point, I need to emphasize that religions, cultures, traditions, world-views and beliefs should be understood as open for change, not as eternal absolute entities. Human rights do not find an end before religions, cultures, traditions, world-views and beliefs, but influence them on a theoretical level. On a practical level, cultural mediation and an adaption of the implementation of human rights to the specific religious, cultural and traditional context is necessary to respect cultural diversity which is protected by human rights.

Concerning the dialogue about differences between religions, cultures, traditions and world views, the recognition of the differences leads to a better understanding and supports human rights on a practical level. This inter-cultural and inter-religious dialogue would benefit from a frame of reference, how this dialogue should be led in order to exclude the possibilities of discrimination and of arbitrariness. Human rights could serve as this frame of reference.

Of course, human rights are individual rights and embrace the perspective of the individual, not of the community: human rights do not protect traditions, cultures, religions as such, but *the freedom* of the individual to share the beliefs, thoughts and world-views of a community, to be part of a community and to practice their way of life. This difference is criticized as an individualistic bias of human rights, overlooking article 29. The latter positions the individual within its community and underlines the important role of the community for the development of the individual and the responsibilities of the individual within the community.

Participation – A Human Right

Discussing the relation between democracy and human rights it is of significance to emphasize firstly that democracy is based on the human right to participate in the political decision process (Article 21 of the Universal Declaration of Human Rights of 1948), also called the ‘democracy principle’:

1. Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.
2. Everyone has the right of equal access to public service in his country.
3. The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

We have a human right to democracy. Human rights and democracy go hand in hand as democracy is the political system which embodies the autonomy of the individual inherent within the idea and concept of human rights.

Chances and Challenges of a Democratic Justification of Human Rights

One possibility to legitimate human rights is on the legal or political dimension through a democratic process. Juergen Habermas (1994) and others link the reason why a human being is a holder of human rights to a national legal system in which human rights become part of the fundamental rights of the constitution through a democratic process. In the framework of internal logic of a legal system the legal subjects acknowledge each other as holders of these rights. At first sight, legitimating human rights through a process in which every human being has a right to participate seems to be convincing. But this approach

undermines the universality of human rights, because human rights can then exist only within a particular legal system of a particular legal society. Human beings who are not citizens of this particular legal society remain without human rights. This would be against the universality of human rights. Human rights open a global horizon and start locally at the same time. In 1958, Eleanor Roosevelt said, on the occasion of the tenth anniversary of the Universal Declaration of Human Rights of 1948:

Where, after all, do universal human rights begin? In small places, close to home – so close and so small that they cannot be seen on any maps of the world. Yet they are the world of the individual person; the neighborhood he lives in; the school or college he attends; the factory, farm or office where he works. Such are the places where every man, woman and child seeks equal justice, equal opportunity, equal dignity without discrimination. Unless these rights have meaning there, they have little meaning anywhere. Without concerned citizen action to uphold them close to home, we shall look in vain for progress in the larger world.

The perception of violations of human rights in one's own living context leads to recognition of one's own responsibility for the cause of human rights and one's own self-understanding as a global citizen with her/his responsibility for the realization of human rights.

Human Rights – Fundament of and Frame of Reference for a Democracy

As the democratic principle is part of human rights, a democracy is built on the fundament of human rights. Democracy can also be seen as the institutional expression of the respect of the individual's autonomy, giving an individual the possibility to participate in the opinion-building and decision-making process of the legal system she/he lives in as a citizen.

At this point, one challenge of today's democratic societies appears to be the problem that within legal society not all right holders can participate in democratic decisions, for example, persons living in this particular legal society without citizenship of this particular state. Changes in the access to vote on the community level are first small steps to a solution of this problem.

The second challenge is the following. It is imaginable that a majority is in favor of something which violates the human rights of a minority. We do not have to look back in history too far to find some examples for this theoretical observation. The Swiss case to ban the building of minarets is an example for this, I am afraid. A majority voted in a democratic process in favor of a law discriminating a minority within the national legal system, in this case that they are not allowed to build minarets at all. (Beforehand everybody – religious communities and of course the Muslim community as well – had to respect the Swiss building code in planning and raising a building.) Furthermore, the ban violates the freedom of religion of this minority as well. The example shows that a reductionist understanding of democracy can lead to human rights violations within so-called democratic processes. Why 'reductionist'? The idea and concept of democracy includes human rights, as democracy is built on the fundament of human rights, in front of all on the democratic principle as part of human rights. Therefore, the respect of human rights is a part of a democratic system. So a democracy must integrate mechanisms which ensure that human rights are respected regarding the access to democratic opinion-building and decision-making processes and in the way these processes are taking place, as the possibility of a democratic decision violating human rights is excluded from the start. Human

rights are the frame of reference for a democracy. Different forms to guarantee the respect within a democratic system are known, for example, the Constitution, the Supreme Court, *etc.* and need to be established in democracies in which they do not exist for purposes of the further realization of human rights.

What do I expect to happen in Switzerland? As Switzerland ratified the European Convention of Human Rights by a democratic decision, when for the first time a request to build a minaret in Switzerland will be denied based on the new legislation, this decision will be challenged in the European Court of Human Rights and lead to a judgment which then must be respected by Switzerland. Therefore, at the end of the day it will not be possible to implement this human-rights-violating law.

In the aftermath of this vote, a public discussion started with the result that a new way of dealing with initiatives which are not respecting human rights is examined to prevent something like this can happen again. I see this as a positive reaction.

At the same time I am concerned by the negative impact this entire process will have on the political participation.

I am concerned by the attempts of political forces in Switzerland to create an alleged conflict between democracy and human rights – describing human rights as ‘foreign power’ violating the national sovereignty and the will of the people – in order to bash human rights and to damage the reputation of institutions working for the realization of human rights, for example, the UN human rights bodies, the European Court of Human Rights, and so on.

I am concerned that in this way the ground is created for ridiculing the criticisms coming from human rights institutions regarding human rights violations in Switzerland.

Although these concerns are provoked by the concrete example from Switzerland, nothing indicates that this represents an isolated problem of Switzerland. This concrete example helps to illustrate some general challenges linked to the relation between democracy and human rights which exist and could exist in every corner of the world.

Automatically Democratic? Human Rights Education Contributing to the Functioning of a Democracy

Human rights education could meet these challenges and address the naïve assumption as well that every human being is born democratic and with the skills and competencies to participate in a democratic opinion-building and decision-making process. Thomas Hammarberg emphasizes: ‘Educating citizens in their human rights creates an informed society which in turn strengthens democracy’ (Hammarberg 2008). In the occasion of an expert-seminar during the preparation-process of the UN Declaration on Human Rights Education and Training in Marrakech 2009,¹ Navanethem Pillay, UN-High Commissioner for Human Rights, outlined the expectations from human rights education: ‘Human Rights Education is essential for the prevention of human rights abuses, the promotion of non-discrimination, equality and sustainable development, and the enhancement of people's participation in democratic decision making processes’. Human rights education contributes to the functioning of democracy.

¹ The author has contributed as a consultative expert to the development of the UN Declaration on Human Rights Education and Training during the entire preparation process of the Declaration.

The fundamental role of human rights education is to empower citizens to defend their own rights and those of others. 'This empowerment constitutes an important investment for the future, aimed at achieving a just society in which all human rights of all persons are valued and respected' (de Mello 2004: 3). The idea of 'empowerment' means the capability to determine one's own present and future with self confidence and awareness of one's own rights and to participate actively in the political decision process.

The UN Declaration on Human Rights Education and Training (Article 2/2) defines human rights education and training as:

Human rights education and training comprises all educational, training, information, awareness-raising and learning activities aimed at promoting universal respect for and observance of all human rights and fundamental freedoms and thus contributing, inter alia, to the prevention of human rights violations and abuses by providing persons with knowledge, skills and understanding and developing their attitudes and behaviours, to empower them to contribute to the building and promotion of a universal culture of human rights.

- a) education about human rights, which includes providing knowledge and understanding of human rights norms and principles, the values that underpin them and the mechanisms for their protection;
- b) education through human rights, which includes learning and teaching in a way that respects the rights of both educators and learners;
- c) education for human rights, which includes empowering persons to enjoy and exercise their rights and to respect and uphold the rights of others.

I suggest an understanding of human rights education (Kirchschlaeger and Kirchschlaeger 2009) including the 'when' (duration of the educational process), the 'why' and the 'how' in the definition of human rights education. Regarding the 'when', I recognize human rights education as a 'lifelong-learning process' which can never be concluded completely. This echoes the understanding of human rights whose realization is always an on-going task and whose character is very dynamic as new elements and spheres of human rights protection can be explored or developed. Human rights education is not a subject which can be taught, learned, and tested and which will then be followed by another subject. Instead, it will be recognized as an aspect which accompanies the process of education beyond the boundaries of individual subjects. It will play the role of a leitmotif for teaching any subject matter.

Regarding the 'why', I understand human rights education as 'education *to* human rights', a philosophy-based education process aiming at understanding the idea, the concept and, before anything else, a profound examination of the justification of human rights respecting the reflected autonomy of every individual as coherent to the idea of human rights, acknowledging cultural diversity, diversity of religions, diversity of traditions, diversity of world views, *etc.* and emphasizing the critical maturity of every individual supported by the helpful framework of critical questioning – human rights.

Regarding the 'how', 'education *in* human rights' means that the methods, instruments, tools, context (which can be formal, non-formal and informal) and process of human rights education must be in coherence with human rights as well, for example they must convince in their participatory mode.

In this definition of human rights education as 'lifelong and formal, non-formal, informal education *to, in, about, through* and *for* human rights', the single elements are interrelating and complementary, for example, the 'education *to*' is crucial for the 'education

for' human rights as human rights theory in general – corresponding to human rights practice – is a necessary fundament for human rights education and the human rights practice.

Human rights education has a global horizon, as Irene Khan points out

If citizenship education empowers people to become active citizens of their own country, human rights education empowers them to take up the challenges of global citizenship, by teaching them about global values. It is not just a question of learning skills and acquiring abilities. Human rights education teaches you to take action, and it empowers you to defend your rights and the rights of others (Khan 2006: 38).

Based on the universality of human rights, human rights education uses an inclusive approach.

Human rights can only be realized if every human being knows about her/his rights, understands her-/himself as a rights-holder and is able to identify the corresponding duty-bearers. Only this way human beings can claim their rights and claim the rights of others in solidarity ('empowerment') (Lohrenscheit 2006). This awareness of human rights is the basis for the possibility to defend her-/himself and to prevent violations of her/his rights and the rights of others. Knowing and being aware of her/his own rights and the rights of others and corresponding duties make human rights alive (Tibbitts and Kirchschlaeger 2010) – including the human right to participation.

Conclusions

I conclude with emphasizing that democracy and human rights go hand in hand. This means that every human being has a human right to democracy. Can human rights also be realized in a political and legal system which is not democratic? No, human rights cannot be fully implemented if the political and legal system is not democratic as every human being's participation in opinion-building and decision-making processes is protected by human rights.

Going hand in hand means also that human rights can be legitimated by democratic processes, but in addition a moral justification which goes beyond the boundaries of national democratic systems is necessary to ensure that every human being – even outside of these boundaries – are holders of human rights.

The going hand in hand of democracy and human rights embraces the essential role human rights play for a democracy as its fundament and its frame of reference. Democratic opinion-building and decision-making processes have to respect human rights in the access to them, in the way they are implemented, but also in their conclusions.

This complex relationship between democracy and human rights shows the need for education in democracy which overcomes the reductionist understanding of democracy to recognize only the will of the majority, the need for human rights education. Human rights education is the essential fundament of the implementation of human rights as every human being needs to know about her/his rights. Human rights education is a 'must have' and not a 'nice to have' in today's pluralistic society where human rights enable us to live in peaceful coexistence with respect for the human dignity of each other and with tolerance across the boundaries of traditions, cultures, religions, world views and opinions; where human rights empower the individual to participate in a democratic opinion-building and decision-making process; where human rights protect minorities from the human rights-violating decisions of a majority.

References

- Alexy, R. 1998.** Die Institutionalisierung der Menschenrechte im demokratischen Verfassungsstaat. In Gosepath, S., and Lohmann, G. (eds.), *Philosophie der Menschenrechte* (pp. 244–264). Frankfurt am Main: Suhrkamp.
- Arendt, H. 1986.** *Elemente und Ursprünge totaler Herrschaft. Antisemitismus, Imperialismus, totale Herrschaft*. München-Zürich: Piper.
- Bobbio, N. 1998.** *Das Zeitalter der Menschenrechte, Ist Toleranz durchsetzbar?* Berlin: Wagenbach.
- Burke, E. 1987.** *Reflections on the Revolution in France*. Indianapolis, IN: Hackett.
- Geiger, K. F., and Kieserling, M. 2001. (Eds.).** *Asiatische Werte. Eine Debatte und ihr Kontext*. Münster: Westfälisches Dampfboot.
- Habermas, J. 1994.** *Faktizität und Geltung. Beiträge zur Diskurstheorie des Rechts und des demokratischen Rechtsstaats*. 2nd ed. Frankfurt am Main: Suhrkamp.
- Hammarberg, T. 2008.** *Viewpoint* 06/10/2008. Strasbourg. URL: http://www.coe.int/t/commissioner/Viewpoints/081006_en.asp.
- Hoeffe, O. 1999.** Transzendentaler Tausch, Eine Legitimationsfigur für Menschenrechte? In Gosepath, S., and Lohmann, G. (eds.), *Philosophie der Menschenrechte* (pp. 29–47). Frankfurt am Main: Suhrkamp.
- Hoffmaster, B. 2006.** What Does Vulnerability Mean? *Hastings Center Report* 36(2): 38–45.
- Kaelin, W. 2004.** What are Human Rights? In Kaelin, W., Mueller, L., and Wytenbach, J. *The Face of Human Rights* (pp. 14–37). Baden: Lars Mueller Publishers.
- Khan, I. 2006.** Education as a Foundation for Human Rights Practice. In Kirchschlaeger, P. G., Kirchschlaeger, T., Belliger, A., and Krieger, D. (eds.), *Menschenrechte und Bildung, Internationales Menschenrechtsforum Luzern (IHRF)*, Vol. III (pp. 35–41). Bern: Staempfli.
- Kirchschlaeger, P. G. 2007.** Brauchen Menschenrechte eine (moralische) Begründung? In Kirchschlaeger, P. G., Kirchschlaeger, T., Belliger, A., and Krieger, D. (eds.), *Menschenrechte und Kinder, Internationales Menschenrechtsforum Luzern (IHRF)*, Vol. IV (pp. 55–63). Bern: Staempfli.
- Kirchschlaeger, P. G. 2011.** Das ethische Charakteristikum der Universalisierung im Zusammenhang des Universalitätsanspruchs der Menschenrechte. In Ast, S., Mathis, K., Hänni, J., Zabel, B. (eds.), *Gleichheit und Universalität. ARSP-Beihefte*, Vol. 128 (pp. 301–312). Stuttgart: Franz Steiner Verlag.
- Kirchschlaeger, P. G. 2013a.** *Wie können Menschenrechte begründet werden? Ein für religiöse und säkulare Menschenrechtskonzeption anschlussfähiger Ansatz*. Münster: LIT Verlag.
- Kirchschlaeger, P. G. 2013b.** Menschenrechte und Politik. In Yousefi, H. (ed.), *Geschichten – Erscheinungsformen – Neuere Entwicklungen* (pp. 255–260). Heidelberg: Springer.
- Kirchschlaeger, P. G., and Kirchschlaeger, T. 2009.** Answering the ‘What’, the ‘When’, the ‘Why’ and the ‘How’: Philosophy-Based and Law-Based Human Rights Education. *Journal of Human Rights Education* 1: 26–36.
- Lohmann, G. 2002.** Menschenrechte und ‘globales Recht’. In Gosepath, S., and Merle, J. (eds.), *Weltrepublik, Globalisierung und Demokratie* (pp. 52–62). München: C. H. Beck.
- Lohmann, G. 2004.** Menschenrechte in Theorie und Praxis. In Kirchschlaeger, P. G., Kirchschlaeger, T., Belliger, A., and Krieger, D. (eds.), *Menschenrechte und Terrorismus, Internationales Menschenrechtsforum Luzern (IHRF)*, Vol. 1 (pp. 37–42). Bern: Staempfli.

- Lohrenscheit, C. 2006.** A Human Rights Based Approach to Education. In Kirchschlaeger, P. G., and Kirchschlaeger, T. (eds.), *Menschenrechte und Bildung* (pp. 141–150). Bern: Staempfli.
- de Mello Vieira, S. 2004.** Foreword. In de Mello Vieira, S. (ed.), *ABC Teaching Human Rights* (p. 3). New York – Geneva: United Nations High Commissioner for Human Rights (OHCHR).
- Morsink, J. 2010.** The Universal Declaration and the Conscience of Humanity. In Huhle, R. (ed.), *Human Rights and History: A Challenge for Education* (pp. 25–36). Berlin: Stiftung EVZ.
- Sandkuehler, H. J. 2010.** Art. Menschenrechte. In Sandkuehler, H. J. (ed.), *Enzyklopädie Philosophie* (p. 1539). Hamburg: Felix Meiner Verlag.
- Senghaas, D. 1995.** Über asiatische und andere Werte. *Leviathan* 1: 5–12.
- SWI 2009.** Minaret Ban Approved by 57 Per Cent of Voters. *Swissinfo* November 29. URL: http://www.swissinfo.ch/eng/Specials/Islam_and_Switzerland/Minaret_vote/Minaret_ban_approved_by_57%20per_cent_of_voters.html?cid=7793916.
- Tibbitts, F., and Kirchschlaeger, P. G. 2010.** Perspectives of Research on Human Rights Education. *Journal of Human Rights Education* 2(1): 8–29.
- Zurbuchen, S. 2009.** Universal Human Rights and the Claim to Recognition of Cultural Difference. In Sitter-Liver, B., and Hiltbrunner, T. (eds.), *Universality: From Theory to Practice. An Intercultural and Interdisciplinary Debate about Facts, Possibilities, Lies and Myths* (pp. 259–290). Fribourg: Academic Press Fribourg.

Is Geography 'Dead' or 'Destiny' in a Globalizing World? A Network Analysis and Latent Space Modeling Approach of the World Trade Network*

Anthony Howell

Drawing on advancements made in network analysis, statistical modeling, and computer science, this paper employs latent space modeling techniques to explore the role of geography in the global trade economy. Latent space models postulate that the probability of a link between pairs of actors depends on the distance between them in unobserved Euclidean social space and on observed covariates. Using probabilistic models, I investigate the effect that distance has on influencing trade ties in social space, while also controlling for several covariates, including region-based homophily (a proxy for regionalization), transitivity and country wealth. The findings are posited within the 'Geography is dead' thesis and reveal that the distance-destroying result attributed to globalization may be overestimated in the global trade economy.

Keywords: network analysis, latent space model, world trade network, geography, regionalization, globalization.

1. Introduction

Since Toffler (1970) first argued that place is no longer an important determinant due to the evolution of transport and communication systems, numerous scholars have speculated the 'death of geography', giving rise to a heated debate (Ohmae 1990, 1995; Friedmann 1995). O'Brian (1992) proclaimed that the globalization era equates to 'the end of geography', because geographical location no longer matters for economic development due to the increasing rate of globalization. In this context, globalization is defined as 'the deepening integration of global economic activity facilitated by the rapid development of information and communications technology and the underlying trend towards liberalization in trade and investment' (Staples 2007: 99).

Despite the 'geography is dead' claims, many notable (economic) geographers emphasize the critical role of geography in trade, as well as in innovation, knowledge and development (Krugman 1993; Yeung 1998; Massey 1984, 1999; Morgan 2004). It is well known that the effects of globalization are not distributed uniformly throughout the global economy, and there are place- and region-based variations that require a geographical lens in order to understand issues of unequal development (Warwick 2005). Moreover, the

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growing forms of regionalization shed further evidence that geography does matter for trade and economic development. Regionalization is defined here as a process, 'whereby economic interaction, such as flows of goods and capital, increase faster among countries within a particular geographical area than between those countries and others outside the area' (Moore 2007: 36).

In the present paper, I apply latent space modeling – developed by Hoff *et al.* (2002) – to test the 'geography is dead' thesis. Hoff *et al.* (2002) postulate that the probability of a link between pairs of actors depends on the distance between them in unobserved Euclidean social space and on observed covariates. Using the latent space modeling approach, I investigate the effect that distance has on trade ties in latent space, while also controlling for several covariates, including region-based homophily (a proxy for regionalization), transitivity and country wealth.

Stochastic models can be used to identify the specific processes that have led the network to its particular configuration. Both the gravity model and the exponential random graph model (ERGM) are possible approaches to test the relationship between geography and trade. Aside from weak theoretical backing, another main shortcoming with these approaches is that they assume independence among all trade linkages between country pairs. In reality, it is very likely that there is inherent dependency between ties (Shortreed *et al.* 2006). For example, if South Africa and Brazil are trade partners, and China and Brazil are trade partners, then it is more likely that South Africa and China are trade partners than it is if these previous trade relationships did not exist.

By implementing proxies to take into account second- and third-order dependences in the network, the latent space model is one method to deal with this dependency.

This paper attempts to add to the growing literature on the World Trade Network (WTN), as well as to test the 'death of geography' thesis, by statistically analyzing the role of geography and trade integration using latent space stochastic models. To carry out these objectives, I estimate several simple latent space models to capture the relationship between distance and the likelihood of two countries establishing a trade partnership in the WTN, while also taking into account higher order dependencies in the network. Results from the analysis support regionalization, in favor of the 'geography is destiny' thesis (Dieter 2007), implying that proponents of the 'geography is dead' overestimate the distance-destroying effects of globalization on the global trade economy.

The outline of this paper is as follows. In the subsequent section, I provide a brief background on relevant network analysis studies. In Section 3, I discuss issues related to building, specifying and representing the trade network. In Section 4, I provide an overview of the main network statistics and network properties commonly used to infer patterns in the trade network. Specifically, I consider connectivity, centrality, clustering and hierarchy, as well as homophily and transitivity. In Section 5, I specify several latent space models and test the principles of propinquity, homophily and transitivity. Lastly, Section 6 concludes with some final remarks.

2. Background

Due to advancements in physics and computer science, network analysis is increasingly relied upon to study the world trade network and is a powerful tool that can be used to reveal topological properties, as well as the underlying structure of the trade network (Fagiolo *et al.* 2009; Reyes *et al.* 2008, 2010). For instance, network analysis applications

of the world trade network (WTN) have most notably addressed two major questions: 1) does the trade network follow a core-periphery structure (Clark 2008, 2010; Kali and Reyes 2007); and 2) do global elites tend to trade among themselves and what are the effects of international trade on economic growth (Bhattacharya *et al.* 2008; Serrano 2008; Fagiolo *et al.* 2009).

Although comparatively underdeveloped, network analysis has also been employed to investigate the role of geography in the global trade economy. Kim and Shin (2002) argue that network analysis can naturally be extended from dependency/world-systems theory to test the globalization *vs.* regionalization thesis that indirectly tests the role of geography by determining whether countries in the network are globalizing or regionalizing (Aggarwal and Koo 2005; Kim and Shin 2002; He and Deem 2010).

Findings from network analysis contribute to the debate over whether regionalization is a stepping stone or stumbling block to globalization (Bhagwati *et al.* 1999). On the one hand, some scholars believe that regionalization is a transitory step that some countries pursue to become more competitive on the global market, eventually promoting globalization and rendering geography unimportant. On the other hand, other scholars suggest that regionalization impedes globalization by hurting the welfare of non-member countries and leading to inefficient production strategies that may work at the regional scale but not at the global scale.

For instance, Kastle *et al.* (2006) provides evidence that the 'movement of trade, capital and people is a geographically heterogeneous and historically episodic process and can be interpreted to support regionalization rather than globalization'. The authors' finding is significant because it highlights the power of geography to influence trade outcomes; even in an ever-increasing globalized world, countries still pursue regional trade integration policies with nearby countries.

Conversely, Kim and Shin (2002) argue that globalization and regionalization are not necessarily competitive, but complementary processes. From 1959–1996, the authors show that the WTN became globalized (overall network density increased significantly), while it also became regionalized (intraregional density also significantly increased). Based on their findings, the authors suggest that regionalization does not jeopardize globalization; rather the two processes are complimentary and can coincide with one another.

While the authors' findings have far reaching implications into the effects of regionalization and globalization on the global economy, the findings are predicated merely on descriptive statistics, in this case, a network statistic called node degree. Node degree measures the probability of a randomly chosen vertex to have k -connections to other vertices and provides a summary of a node's overall activity.¹ The problem with this network statistic, like any other descriptive statistic, is that no statistical model is used to control for other potential intermediating variables that may influence the outcome of a trade tie being established.

Most of the literature on the WTN only examines the network's summary statistics to track topological changes, and few attempts are made to statistically analyze the trade network using stochastic models (notable exceptions are Garlaschelli and Loffredo 2005; Garlaschelli *et al.* 2007). Fitting statistical models to networks, in general, is still in its infancy stages due to the complexity of modeling networks and the high level of computa-

¹ Node degree is discussed in greater detail in Section 4.

tion that is required (Hunter and Handcock 2005). It is not surprising, therefore, that the WTN literature has only recently begun to be modeled; despite the complicated nature of the WTN, pertinent topological properties of the global trade system can and should be extracted through modeling the system as a network (Serrano 2008).

3. The Network Data: Specification and Representation

Bilateral trade data are extracted from the United Nations COMTRADE database. Data for GDP per capita and the trade/GDP share are extracted from Penn World Table 6.2 (for a country listing, see Appendix). In the trade network, countries represent nodes and the links between two countries are their shared imports and exports. If a trade tie is not present, then $y_{ij} = 0$. The data offer information on both exports and imports, however, I use only import data because previous scholars suggest that these figures are more accurate than export figures (Kim and Shin 2002).

A network can be set up as some combination of binary/weighted, directed/undirected and static/longitudinal. For the purposes of this research, I build a binary, undirected and static network. These specifications are chosen for the following reasons: (1) Squartini *et al.* (2011) specify various combinations of the network and find that the projections made by the binary matrix are maximally informative and should be the focus of subsequent models of trade; (2) the number of in and out ties are highly correlated, and in accordance with Fagiolo *et al.* (2009) and Serrano and Boguna (2003), the WTN is sufficiently symmetric to use an undirected analysis; and (3) while the descriptive statistics may change as new countries are incorporated into the network and trade relationships are established and/or strengthened, it is likely that the underlying processes that generate the network are likely to be stable over time (Schiavo *et al.* 2010). To avoid the complexities of using longitudinal data, it is suffice to select a stochastic model for a single year, 2008, to examine the statistical properties of the WTN.

Network Representation

Graph theory, advanced by Harary and his collaborators (Harary 1959; Harary *et al.* 1965), is used to inform much of what we know about how networks work. A graph is a network model consisting of dichotomous (binary) relations. The network can be represented with the following graph notation:

$$G = (V, E), \quad (1)$$

where V is a vertex set, $V = \{v_1, \dots, v_2\}$, and in the undirected graph, $E \subseteq \{(v_i, v_j) : v_i, v_j \in V\}$. In the undirected case, if country i exports to country j or country j exports to country i , then $y_{ij} = 1$. Countries represent vertices, and edges between any two countries (v_i, v_j) exist if at least one million U.S. dollars in trade is transacted during the year in observation. The one million U.S. dollar threshold is common in the WTN literature (Kim and Shin 2002) and is selected in order to focus on significant trade relationships that shape the network.

I set Y to be the adjacency matrix for the random graph G . Y_{ij} is a binary random variable which indicates the state of the i, j edge. The $\Pr(Y_{ij} = y_{ij})$ is the probability of the Y_{ij} edge state. I can express y_{ij} in terms of the WTN as a dichotomous outcome:

$$y_{ij} = \begin{cases} 1 & \text{if } (v_i, v_j) \text{ trade volume} \geq \$1 \text{ million US.} \\ 0 & \text{otherwise} \end{cases} \quad (2)$$

The density of a network is the proportion of present ties to the maximum possible lines in a graph. A $g \times g$ nodal graph can be computed as:

$$\Delta = \frac{\sum_{i,j} y_{ij}}{g(g-1)} \quad (3)$$

The density for the WTN in 2008 is .59, which means based on the number of nodes, trade ties represent approximately 59 per cent of the total possible. There are 7,177 mutual ties in 2008, but 2,799 asymmetric trade ties. Germany, the U.S., and China are the biggest traders averaging around US \$8 billion to each of its trading partners. Almost 40 per cent of countries export something to almost every other country, and every country exports to at least 20 other countries, indicating that the trade network is very concentrated.

Table 1. Network statistics for 2008

	2008
Countries Reporting Trade	190
Graph Density	.59
Total number of dyad trade ties	7,177
Total number of asymmetric trade ties	2,799
Countries making up 50 % of exports	9

Source: Author's calculations using COMTRADE database on reported trade 2008.

4. Network Summary Measures: Definitions and Descriptive Statistics

Each network statistic attempts to explore the underlying structure of the network along one of the four major dimensions: connectivity, assortativity, clustering and centrality. Within each dimension, various node level statistics can be employed to quantify individual positions in the network and describe the local neighborhood. For example, node degree (ND) and node strength (NS) are network statistics used to measure node connectivity. ND is used when dealing with a binary network, and is the fractional count of trading partners a country has relative to all possible trade links in the network. NS is used when dealing with weighted networks, and measures the intensity of these trade links.

Both statistics calculate the number of direct ties coming in and going out of a node and represent how connected a country is within a trade network. High degree positions are influential in the network, and at the same time, may be vulnerable to other actors' influence. These statistical measures are used in the empirical studies to offer evidence for or against increasing globalization. If the statistics increase in value, they show the globe is becoming smaller or more integrated over time.

The average nearest neighbor degree (ANND) and average nearest neighbor strength (ANNS) are the most common network statistics to test assortativity. They measure the number of trading partners and the intensity (volume of trade) of a given country's trading partners. For example, if country A has 20 trading partners and each of those 20 countries trades with 20 other countries, ANND/ANNS gives ND/NS statistics for each of country A's trading partners. These two statistics are commonly employed to assess whether certain groupings of countries tend to trade with well- or less-connected countries. For example, ANND/ANNS can be used to test whether a 'rich club phenomenon' has emerged in the WTN.

The binary clustering coefficient (BCC) and the core clustering coefficient (CCC) are statistics for clustering. The BCC is a ratio that counts the number of triangles that exist compared to the total number of triangles that are possible in the network. CCC measures the trade intensity of these triangles. These statistics offer a perspective on the multi-lateralism vs. bilateralism debate. Clearly, if the statistics increase over time, the WTN is strengthening multi-lateral ties, whereas if the statistic is decreasing, it is associated with a rise in bilateralism.

Lastly, the centrality dimension has probably received the most attention in the network analysis because of its explanatory power of describing the hierarchy that exists within the network. The betweenness (BET) and the random walk betweenness centrality (RWBC) measures are the most commonly employed statistic for the centrality dimension and are based on reach and flow mediation. Both statistics quantify the ability of the ego-node to influence other vertices in the network. The higher is the measure for a country, the higher is the degree of influence that country has on the WTN. Most often, this measure has been found to show a core-periphery hierarchy in the WTN, thus strengthening the position of world-systems perspective.

In addition to network statistics, homophily is an important feature in this study of social networks and helps to explain why we observe a particular type of network. The principle of homophily is predicated on the fact that people with similar characteristics will have a higher rate of contact between them than dissimilar people (Louch 2000; McPherson *et al.* 2001). One can scale this principle up to include, organizations, countries, regions, and so forth. In the present context, I am interested in whether homophily by region exists. That is, do regions delineated by geographical proximity and historical reference tend to trade more among themselves relative to 'outsiders' in other regions that do not share a similar degree of cultural and historical shared experience? While there are many different ways to delineate regions, the most basic source of homophily is space (McPherson *et al.* 2001), so it makes intuitive sense to group countries based on geographic proximity (refer back to Appendix for a country listing by region).

Transitivity is another main feature found within networks. Transitivity is a statistics that measures the degree of network integration. Balance theory predicts that people should adjust their relations until the network becomes stabilized around a pattern where all dyadic ties are largely transitive, that is triadic. This social phenomenon tends to be explained in terms of triadic relationships and by the adage 'a friend of a friend is a friend' (Krivitsky *et al.* 2009). Balance theory predicts that if ties exist between country A and country B and country B and country C, then country A and country C have a strong propensity to develop a tie. A triangle is defined to be any set $f(i; j); (j; k); (k; i)$ of three edges (Morris *et al.* 2008).

Descriptive Network Statistics: Connectivity, Centrality and Homophily

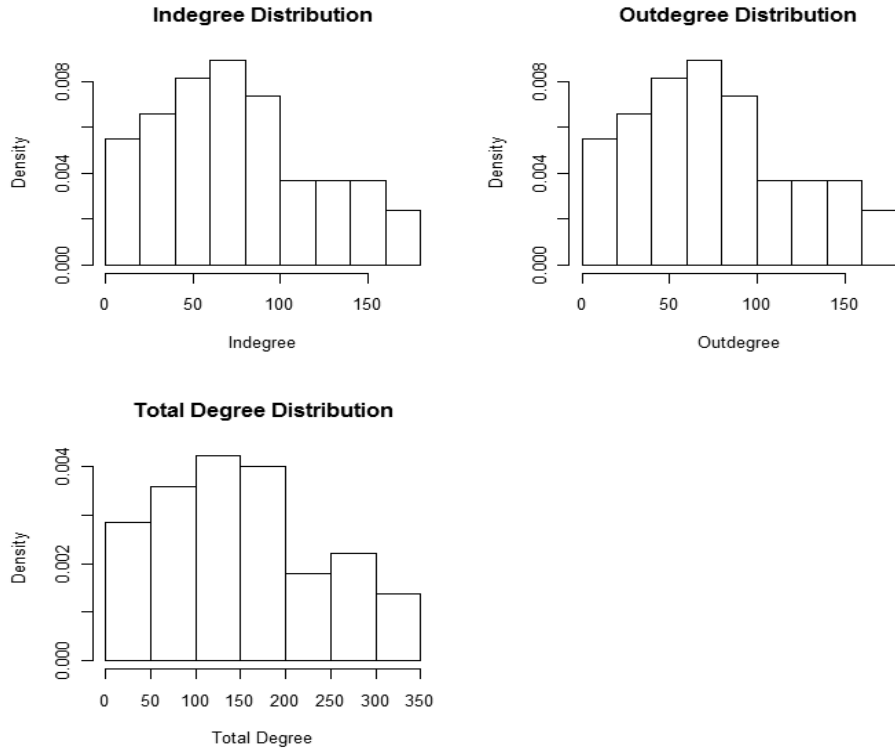
Mathematically, the node degree measures the probability of a randomly chosen vertex to have k -connections to other vertices and provides a summary of a node's overall activity. The number of incoming ties is called in-degree, expressed as the sum of incoming ties over the number of actors in the network minus 1. In-degree ties will equal out-degree ones, expressed as:

$$C_i(n_i) = \frac{\sum_{j=1}^g x_{ji}}{(g-1)} \quad (4)$$

Histograms of the node degree show that the distribution of trading partners is right-skewed, meaning that most countries in the network have a small number of trading partners but a smaller number of countries, referred to as ‘hubs’, have a comparatively larger number of trading partners (see Fig. 1).

Along the second dimension, centrality measures the quantity of walks that pass through the ego-node, that is betweenness. Betweenness (BET) is the tendency for an ego-node to reside on the shortest paths between third parties, that is, to serve as a bridge between two other nodes.

Fig. 1. Node degree distribution for the world trade network



Betweenness relies on the concept of geodesic distance, which is the shortest path between two nodes, i and j . Betweenness can be quantified and expressed as:

$$C_b(n_i) = \frac{\sum_{j < k} \frac{g_{ik}(n_i) \cdot g_{jk}}{(g-1)(g-2)}}{2} \quad (5)$$

where g_{jk} is the number of j, k geodesics (the shortest path between j, k) and $g_{\downarrow ik}(n_i)$ is the number of j, k geodesics that include i . High betweenness positions are associated

with the term 'broker'. In the network literature, a 'broker' is an actor that mediates between third parties who are not directly tied. Both the node degree and betweenness measures are standardized and are compared to the theoretical maximum number of edges possible for that graph, values ranging from 0 to 1.

Another centrality measure that is less commonly explored in the world trade network is the eigenvalue centrality (EC). This measure quantifies the position of the actor in terms of the sum of the centralities of its neighbors, attenuated by a scaling constant (λ). Eigenvector centrality can be expressed numerically as:

$$C_D(n_i) = \frac{1}{\lambda} \sum_{j=1}^g x_{ij} C_D(n_j). \quad (6)$$

Actors with high eigenvector centrality are those with many central neighbors. This centrality measure is often overlooked by the previous articles on the WTN, which is bizarre considering this statistics is ideally suited to test core-periphery relations, a major focus point for the WTN analyses in the past.

Table 2 reports the statistics for a selective number of measures, including connectivity (ND) and centrality (BET, EC) by region. The findings reveal the most connected countries within regions, as well as compare the degree of influence across regions. For example, NAFTA and East Asian countries are the most connected and central/influential regions in the global economy. Despite the high connectivity and centrality scores for the United Kingdom, Germany and France, the EU consists of many small Eastern European countries not very well connected, thereby lowering overall average scores for the EU. SAA and the Arab league are the least connected and least central regions in the global economy.

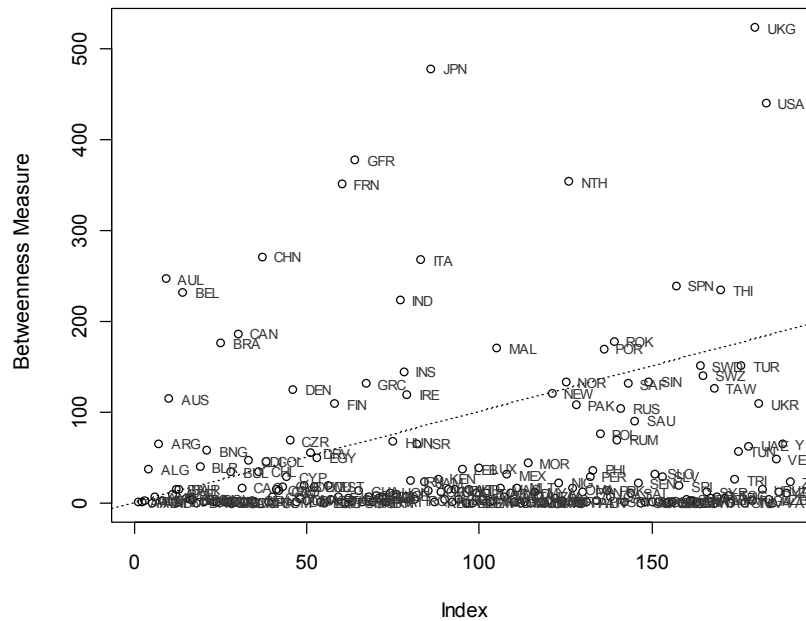
Table 2. Connectivity and centrality measures by region and select countries

Region	ND	BET	EC
1	2	3	4
NAFTA (n = 3)	279.3	218.9	.107
USA	346	439.39	.121
CAN	284	186.2	.11
MEX	208	31.2	.09
EU 2 (n = 40)	210.3	103.8	.084
UKG	344	522.9	.12
GFR	340	376.9	.121
FRN	338	304.3	.11
East Asia (n = 5)	246	177.7	.094
JPN	342	477.7	.12
China	332	270.8	.121
ROK	310	177.21	.11
ECE (n = 11)	156.2	27.4	.079
RUS	278	104	.11
UKR	276	109	.12
BLR	194	39.5	.082

1	2	3	4
ASEAN (n = 10)	191.4	78.5	.079
THI	304	233.7	.113
MAL	298	170.4	.113
INS	292	144.4	.112
SAA (n = 9)	136.7	45.6	.058
IND	314	222.7	.116
PAK	262	107.6	.102
BNG	196	57.68	.082
Arab League (n = 17)	155.4	24.4	.068
SAU	234	90.2	.093
ISR	232	65.3	.095
UAE	218	62.1	.09
Pacific Islands (n = 13)	80	38.04	.033
AUL	294	246.7	.11
AUS	266	114.12	.106
NEW	220	120.7	.09
Latin America (31)	132.9	21.2	.059
BRA	294	175.2	.11
ARG	244	65.3	.101
RUM	242	69.4	.1
African Union (50)	106.3	11.2	.049
SAF	280	131.2	.109
EGY	228	49.5	.096

Within East Asia, China has only ten fewer trading partners than Japan (*i.e.* connectivity), yet its BET centrality score is almost half as big as Japan's. This distinction between connectivity and centrality is a key feature of network analysis. It reveals that although China is increasing the number of its trading partners and becoming better connected with the global economy, its actual influence in the network in terms of trade remains limited relative to Japan. Japan, along with the UK, and the USA have the highest BET centrality score, representing the brokers in the network; China, on the other hand, is plotted much lower than any of these three countries (see Fig. 2).

To gain a better understanding on whether homophily by region is present in the WTN, I present the mixing matrix for each region (Table 3). The mixing matrix presents the count of trade relationships cross-tabulated by the region of the two countries involved. If a strong presence of homophily is present, then there would be large values along the diagonal relative to off-diagonal values. Based on the fact that the diagonal values in the matrix do not tend to be higher than the off-diagonal values, countries do not appear to be overwhelmingly trading within their particular region; homophily by region does not appear to be a major factor.

Fig. 2. Centrality score by country**Table 3.** Mixing matrix by region

	1	2	3	4	5	6	7	8	9	10	11
1	3	104	3	12	21	23	18	40	19	81	92
2	104	590	37	144	302	250	168	388	141	599	893
3	3	37	NA	5	11	10	7	16	7	27	43
4	12	144	5	7	38	37	25	52	23	99	123
5	21	302	11	38	47	48	43	71	27	98	106
6	23	250	10	37	48	40	51	93	43	128	194
7	18	168	7	25	43	51	16	62	29	62	118
8	40	388	16	52	71	93	62	83	44	142	247
9	19	141	7	23	27	43	29	44	13	80	81
10	81	599	27	99	98	128	62	142	80	243	259
11	92	893	43	123	106	194	118	247	81	259	251

There are two caveats to this interpretation. First, marginal totals can be misleading and do not statistically test for the presence of homophily (this will be carried out in the modeling section below). The trade network is also very complex and strict interpretations of homophily are not always straight forward. For example, the largest value in the matrix is between Europe (region 2) and Africa (region 11). Due to the colonization era, African and European countries still maintain a strong, client-like relationship in many cases. Second, there are likely some misleading results due to the way countries are grouped. While there is no 'right' way to group countries into regions, defining China (region 4) as its own region has some drawbacks in certain cases, since its value along the diagonal is 0, and the data only cover international trade. Therefore, it is not possible to see China's intra-trade

relationships and how it compares to other countries' international trade within a particular region.

The number of triangles found in the network area is a proxy for measuring the transitivity. Of the 7,177 ties in the network, the number of triangles is surprisingly large – 157,645. This number is far larger than what would be expected by chance and offers initial evidence that the trade network has a high degree of transitivity. This is significant because it reveals the dyadic trade dependencies among countries supporting the use of a latent space modeling approach.

5. Latent Space and Latent Position Model: Is Geography Dead?

Latent space models have replaced block-modeling as the primary approach to study issues of propinquity, the tendency of spatially proximate vertices to be tied. In other words, latent space models are used to determine the role of geography in the international trade context, and can help examine whether the trade network is globalizing or regionalizing. If proponents of globalization who suggest ‘geography is dead’ are correct in their assertion, then the results of the latent space model will confirm that distance does not play a significant role in influencing the probability that a trade tie is established between country i and country j .

In order to test the role of geography in determining the probability two countries (i, j) form a trade relationship, I specify several latent space models. Based on the presence of homophily indicated by the descriptive statistics, there is evidence that propinquity – the probability of a link between two actors is a function of the distance between them in an unobserved latent space – exists in the trade network.

The latent position model assumes a conditional independence approach to modeling. Let $\{z_i\}$ be the positions of the actors in the social space R^k and $\{x_{i,j}\}$ denote the observed characteristics that are dyad-specific. That is the presence or absence of a trade tie between two countries is independent of all other ties in the system, given the unobserved positions in social space of the two individuals:

$$P(Y|Z, X, \theta) = \prod P(y_{i,j} | z_i, z_j, x_{i,j}, \theta), \quad (7)$$

where X and x_i and $x_{i,j}$ are observed characteristics that are pair-specific and vector-valued and θ and Z are parameters and positions to be estimated (Hoff *et al.* 2002). I use logistic regression to parameterize equation (3).

$$\eta_{i,j} = \log \text{odds}(y_{i,j} = 1 | z_i, z_j, x_{i,j}, \alpha, \beta). \quad (8)$$

$$\eta_{i,j} = \alpha + \beta x_{i,j} - |z_i - z_j|, \quad (9)$$

where the log *odds* ratio for two actors j and k , equidistant from i , is $B(x_{i,j} - x_{i,k})$.

I estimate $\eta_{i,j}$ using the log-likelihood of a conditional independence model, expressed as

$$\log P(Y|\eta) = \sum_{i \neq j} \left\{ \eta_{i,j} y_{i,j} - \log(1 + e^{\eta_{i,j}}) \right\}, \quad (10)$$

where η is a function of parameters and unknown positions. As such, I use maximum-likelihood to estimate η . Model degeneracy is a serious problem that frequently occurs when dealing with networks. If a model is degenerate then the terms in the model are grossly unsuitable at describing the underlying processes that form the observed network. That is, even under the maximum likelihood coefficients in the model, the observed net-

work is so unlikely to occur that the model cannot even be properly estimated (Goodreau *et al.* 2008). To check for issues of degeneracy, I carry out an MCMC estimation procedure for each model that I estimate. The results show that the model statistics do not diverge from the mean, meaning that the models are not degenerate and the maximum likelihood estimates are reliable.

I specify several simple latent space models to test the role of distance and region-based homophily. Table 4 reports the coefficients generated from the latent space models. Model 1 only examines the role of distance in establishing a trade partner. The coefficient on EDGES is highly significant and positive, indicating that larger distances increase the likelihood of two countries establishing a tie. This finding is bizarre and at odds with predictions made by gravity models that predict trade decreases as a function of distance. In Models 2 and 3, I give additional measures to control for underlying structures within the network that may affect whether a trade tie is established.

Table 4. Latent space models (d=2)

	Model 1	Model 2	Model 3	Model 4
Edges	2.56***	-5.73***	-6.21***	-6.13***
Latentcov (homoregion)		26.25***	27.20***	27.81***
Triangle			1.84***	2.02***
Nodecov.GDP				1.42***

A good model is the one that accounts for a country's tendency for assortative mixing, which is based on the notion of homophily (*Ibid.*). In the present context, I want to account for assortative mixing that may occur for countries that belong to a particular region. If assortative mixing is present, then countries within the same region have a greater probability of forming a tie relative to countries in other regions.

Model 2 introduces *Homoregion*, a covariate that accounts for homophily. In this model, I find the sign of the EDGES coefficient switches from negative to positive, confirming the conventional relationship between trade and distance. In other words, the likelihood of two countries forming a tie decreases as distance between countries in latent space increases. The coefficient on *Homoregion* is very large and statistically significant. This finding indicates that countries classified into the same regional grouping will be more likely to form a trade tie within their own region than with countries from other regional groupings, in support of the regionalization thesis. Model 3 adds *Triangle* to take into account the transitive nature of the network. The significant, positive coefficient for *Triangle* confirms that if two countries i, j , have a mutual trading partner, m , then the likelihood that countries i, j begin to trade increases.

In addition to controlling for network statistics, Model 4 adds real per capita GDP, *Nodecov.GDP* as an additional covariate to control for the effect of wealth on countries forming a tie. The positive, statistically significant coefficient produced by the wealth covariate reveals the hierarchical structure of the network, meaning that rich countries tend to trade disproportionately among themselves.

6. Conclusion

The findings presented in this paper suggest that regionalization is a particularly important strategy pursued by countries in the global economy. The integration of regional blocs,

along with the proliferation of regional trade agreements (RTAs) promote regionalization and have emerged as individual countries attempt to mitigate the new economic and security vulnerabilities (unregulated capital flows, human and drug trafficking, transnational terrorist networks, disease, *etc.*) brought about by globalizing forces that undermine individual states' territorial sovereignty. The process of regionalization signals that 'geography is destiny' (Dieter 2007: 11), as opposed to 'geography is dead'.

The results of the descriptive analyses in this report agree with other previous work. The WTN network has a high density, the node degree has a high right-skew, trade partners of well-connected countries are less interconnected relative to those of poorly connected ones, and countries holding many trade partners are on average connected with countries holding relatively few countries. The latent space model tests directly the role of space in determining the likelihood of whether or not a tie will be established. When controlling for regional homophily and other covariates, the Euclidean distance – calculated in social space – is returned negative, significant, and large in magnitude. This result supports findings in the gravitas literature on trade and reaffirms that the probability that trade ties are established decreases as distance increases. Lastly, the latent space models add an additional dimension of analysis of the WTN by controlling for network dependencies, and reveals that region-based homophily – the proxy for regionalization – has a large and significant influence on trade outcomes, even more so than a country's wealth.

Despite the complicated nature of the WTN, pertinent topological properties of the global trade system are extracted through modeling the system as a network, and are used to show the significance of geography in influencing trade outcomes. Understanding the structure of the global trade network has implications for research across numerous social science disciplines trying to examine the effects of geography on economic integration and internationalization. Future areas of research can extend the latent space model applied in this paper to examine the evolutionary role of geography over time. Although evidence reported in this paper suggests that geography maintains a crucial role in the trade network, it is indeterminate whether geography's impact on trade ties is increasing or decreasing over time.

References

- Aggarwal, V. K., and Koo, M. G. 2005.** Beyond Network Power? The Dynamics of Formal Economic Integration in Northeast Asia. *The Pacific Review* 18: 189–216.
- Bhagwati, J., Greenaway, D., and Panagariya, A. 1999.** Trading Preferentially: Theory and Policy. *The Economic Journal* 108: 1128–1148.
- Bhattacharya, K., Mukherjee, G., Saramaki, J., Kaski, K., and Manna, S. 2008.** The International Trade Network: Weighted Network Analysis and Modeling. *Journal of Statistical Mechanics: Theory and Experiment* 2008(02): P02002. Doi: 10.1088/1742-5468/2008/02/p02002.
- Clark, R. 2008.** Dependency, Network Integration, and Development. *Sociological Perspectives* 51: 629–648.
- Clark, R. 2010.** World-System Mobility and Economic Growth, 1980–2000. *Social Forces* 88: 1123–1151.
- Dieter, H. 2007.** An Introduction. In Dieter, H. (ed.), *The Evolution of Regionalism in Asia: Economic and Security Issues* (pp. 3–10). London: Routledge.

- Fagiolo, G., Reyes, J., and Schiavo, S. 2009.** World-Trade Web: Topological Properties, Dynamics, and Evolution. *Physical Review E Statistical* 79: 1–36.
- Friedmann, J. 1995.** Where We Stand: A Decade of World City Research. In Knox, P., and Taylor, P. (eds.), *World Cities in a World-System* (pp. 21–47). Cambridge: Cambridge University Press.
- Garlaschelli, D., and Loffredo, M. 2005.** Structure and Evolution of the World Trade Network. *Physica A: Statistical Mechanics and Its Applications* 355: 138–144.
- Garlaschelli, D., Di Matteo, T., Aste, T., Caldarelli, G., and Loffredo, M. 2007.** Interplay between Topology and Dynamics in the World Trade Web. *The European Physical Journal B* 57: 159–164.
- Goodreau, S. M., Handcock, M. S., Hunter, D. R., Butts, C. T., and Morris, M. 2008.** A Statnet Tutorial. *Journal of Statistical Software* 24: 1–27.
- Harary, F. 1959.** A Graph Theoretic Method for the Complete Reduction of a Matrix with a View Toward Finding its Eigenvalues. *Journal of Math Physics* 68: 104–111.
- Harary, F., Norman, R., and Cartwright, D. 1965.** *Structural Models: An Introduction to the Theory of Directed Graphs*. New York: Wiley.
- He, J., and Deem, M. 2010.** Structure and Response in the World Trade Network. *Physical Review Letters* 105: 1–4.
- Hoff, P. D., Raftery, A. E., and Handcock, M. S. 2002.** Latent Space Approaches to Social Network Analysis. *Journal of the American Statistical Association* 9: 1090–1098.
- Hunter, D. R., and Handcock, M. S. 2005.** Inference in Curved Exponential Family Models for Networks. *Journal of Computational and Graphical Statistics* 15: 565–583.
- Kali, R., and Reyes, J. 2007.** The Architecture of Globalization: A Network Approach to International Economic Integration. *Journal of International Business Studies* 38: 595–620.
- Kastelle, T., Steen, J., and Liesch, P. 2006.** Measuring Globalization: An Evolutionary Economic Approach to Tracking the Evolution of International Trade. *DRUID Summer Conference* (pp. 1–41). Copenhagen.
- Kim, S., and Shin, E.-H. 2002.** A Longitudinal Analysis of Globalization and Regionalization in International Trade: A Social Network Approach. *Social Forces* 81: 445–468.
- Krivitsky, P. N., Handcock, M. S., Raftery, A. E., and Hoff, P. D. 2009.** Representing Degree Distributions Clustering and Homophily in Social Networks with Latent Cluster Random Effects Models. *Social Networks* 31: 204–213.
- Krugman, P. 1993.** *Geography and Trade*. Cambridge, MA: Cambridge University Press.
- Louch, H. 2000.** Personal Network Integration: Transitivity and Homophily in Strong-Tie Relations. *Social Networks* 22: 45–64.
- Massey, D. 1984.** *Spatial Divisions of Labor: Social Structures and the Geography of Production*. New York: Methuen.
- Massey, D. 1999.** Imagining Globalization: Power-Geometries of Time-Space. In Brah, A., Hickman, M., and Mac an Ghail, M. (eds.), *Global Futures: Migration Environment and Globalization* (pp. 27–44). Basingstoke: Macmillan.
- McPherson, M., Smith-Lovin, L., and Cook, J. M. 2001.** Birds of a Feather: Homophily in Social Networks. *Annual Review of Sociology* 27: 415–444.

- Moore, T. 2007.** China's Rise in Asia: Regional Cooperation and Grand Strategy. In Dieter, H. (ed.), *Evolution of Regionalism in Asia: Economic and Security Issues* (pp. 34–56). London: Routledge.
- Morgan, K. 2004.** The Exaggerated Death of Geography: Learning Proximity and Territorial Innovation Systems. *Journal of Economic Geography* 4: 3–21.
- Morris, M., Handcock, M. S., and Hunter, D. R. 2008.** Specification of Exponential-Family Random Graph Models: Terms and Computational Aspects. *Journal of Statistical Software* 24: 1548–7660.
- Ohmae, K. 1990.** *The Borderless World: Power and Strategy in the Interlinked Economy*. New York: Harper.
- Ohmae, K. 1995.** *The Evolving Global Economy: Making Sense of the New World Order*. Boston, MA: Harvard Business Review Press.
- O'Brian, R. 1992.** *Global Financial Integration: The End of Geography*. New York: Foreign Relations Press.
- Reyes, J., Schiavo, S., and Fagiolo, G. 2008.** Using Complex Network Analysis to Assess the Evolution of International Economic Integration: The Cases of East Asia and Latin America. *LEM Working Paper Series 2008/10*, Laboratory of Economics and Management (LEM), Sant'Anna School of Advanced Studies, Pisa, Italy.
- Reyes, J., Schiavo, S., and Fagiolo, G. 2010.** Using Complex Networks Analysis to Assess the Evolution of International Economic Integration: The Cases of East Asia and Latin America. *The Journal of International Trade & Economic Development* 19: 215–239.
- Schiavo, S., Reyes, J., and Fagiolo, G. 2010.** International Trade and Financial Integration: A Weighted Network Analysis. *Quantitative Finance* 10: 389–399.
- Serrano, M. 2008.** Rich-Club vs Rich-Multipolarization Phenomena in Weighted Networks. *Physical Review E* 78: 026101.
- Serrano, M. A., and Boguna, M. 2003.** Topology of the World Trade Web. *Physical Review E* 68: 015101.
- Shortreed, S., Handcock, M. S., and Hoff, P. D. 2006.** Positional Estimation within the Latent Space Model for Networks. *Methodology* 2: 24–33.
- Squartini, T., Fagiolo, G., and Garlaschelli, D. 2011.** Rewiring World Trade. Part I. A Binary Network Analysis. *LEM Working Paper Series 2011/08*, Laboratory of Economics and Management (LEM), Sant'Anna School of Advanced Studies, Pisa, Italy.
- Staples, A. 2007.** Responses to Regionalism: Corporate Strategy in East Asia. In Dieter, H. (ed.), *Evolution of Regionalism in Asia: Economic and Security Issues* (pp. 99–122). London: Routledge.
- Toffler, A. 1970.** *Future Shock*. New York: Bantam Books.
- Warwick, M. 2005.** *Geographies of Globalization*. London – New York: Routledge.
- Yeung, H. 1998.** Capital State and Space: Contesting the Borderless World. *Transactions of the Institute of British Geographers* 23: 291–309.

Appendix

190 countries are placed into 11 regions. These regions are based on present-day trading blocs and/or geographical location. Several regions combine two or more economic trading blocks that span a certain geographic region. For example, the EU, EFTA and Central European FTA member countries are all categorized as one European region based on their geographical proximity. Similarly, UNASUL, Caribbean Community and the Central American Integration System member countries are all categorized as Latin America.

Regional Groupings

NAFTA (Region 1)	CAN	RUS
CAN	CAO	TAJ
MEX	CAP	TKM
USA	CDI	UKR
Europe (Region 2)	CEN	UZB
ALG	CHA	ASEAN (Region 6)
AND	CHL	BRU
ANG	CHN	CAM
ARG	COL	DRV
ARM	COM	INS
AUL	CON	LAO
AUS	COS	MAL
AZE	CRO	DRV
BAH	CUB	MYA
BAR	East Asia (Region 3)	PHI
BEL	(Also Region 4)	SIN
BEN	JPN	THI
BFO	MON	South Asia Association (Region 7)
BHM	PRK	AFG
BHU	ROK	BHU
BLR	TAW	BNG
BLZ	CHN	IND
BNG	Eurasian Economic	MAD
BOL	Community	NEP
BOS	(Region 5)	PAK
BOT	ARM	SOL
BRA	AZE	SRI
BRU	BLR	
BUI	GRG	
BUL	KYR	
CAM	KZK	

Arab League (Region 8)	COL	ETH
BAH	COS	GAB
EQG	CUB	GAM
IRN	DOM	GHA
IRQ	ECU	GNB
ISR	GRN	KEN
JOR	GUA	LBR
KUW	GUI	LES
LEB	GUY	LIB
MOR	HAI	LIE
OMA	HON	MAG
PAL	JAM	MAS
QAT	MSI	MAW
SAU	NIC	MLI
SUD	PAN	MZM
SYR	RUM	NAM
UAE	SAL	NIG
YEM	SKN	NIR
Pacific Islands	SLU	PAR
(Region 9)	SUR	PER
AAB	SVG	RWA
AUL	TRI	SAF
AUS	URU	SEN
DMA	VEN	SEY
FJI	African Union	SIE
FSM	(Region 11)	SOM
KBI	ANG	STP
NAU	BEN	SWA
NEW	BFO	TAZ
PNG	BOT	TOG
TON	BUI	TUN
TUV	CAO	UGA
VAN	CAP	ZAM
Latin America (Region 10)	CDI	ZIM
ARG	CEN	
BAR	CHA	
BHM	COM	
BLZ	CON	
BOL	DJI	
BRA	DRC	
BRA	EGY	
CHL	ERI	

Regionalism, Globalization, and Economic Development of the World*

Hae Kim

This study evaluates the effects of regionalism on economic development in the world basing on the panel data of 217 countries. In general, regionalism pursued by countries via their respective regional organizations was found to have no significant independent effect on the economic development. Regardless of regionalism, the international economic variables such as globalization and terms of trade, as well as domestic variables such as population growth, urbanization and ethnic composition were found to have significant impact on economic development. In affecting economic development, the individual sovereign member states of regional organizations are independent of the collective institutional design of the regional organization they are affiliated with.

Keywords: regionalism, regional intergovernmental organizations, globalization, suppressor variable, economic development.

The purpose of the present article is to analyze the effectiveness of regionalism by regional organizations in the world in affecting economic development. Not only regional intergovernmental organizations (RIGOs) like the European Union (EU), African Union (AU) and Association of Southeast Asian Nations (ASEAN), but also the regional free trade agreements (RFTAs) like North American Free Trade Agreement (NAFTA) are the driving forces of regionalism. The task of empirically assessing the effects of regionalism on economic development has been a critical challenge not only in developing but also in developed countries. There are many other international as well as domestic variables that could also affect economic development. The effect study of regionalism should also cover 'all' regions in the world and this study is based on major regionalisms, aiming at covering all regions/subregions in the world: Europe, Africa, Southeast Asia, South Asia, Pacific Rim, Central Asia, North and South America, and Middle East.

Different Views on Regionalism

Regionalism is based on the following three ingredients: identifiable geographical region, geographical proximity and an organization with a common sense of identity and purpose (economic, political, security/military, *etc.*) among the member states. There are many views of the whys and wherefores of the joining the regional organizations. One of them is the efficiency of collective activities (Abbott and Snidal 1998; Karns and Mingst 2010: 6). The economic integration via regional organizations generates economies of scale. The regionalism by RIGOs is also viewed from the perspectives of global and/or regional governance

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as well. Rosenau (1995) has used the 'governance' to denote the regulation of interdependent relations in the absence of an overarching political authority such as in international system. Najam (2003) has also defined global governance as the management of global processes in the absence of global government. According to Weiss (2000), global governance refers to concrete cooperative problem-solving arrangements. The governance undertaken by international organizations (IOs), global or regional, over the member states is to deal with many global and regional issues, which are related to economic development, among others. If the member states wish to benefit from regionalism, they must align with the principles, norms, and rules of the IOs. According to the constructivism, IOs serve as agents of social construction and they can construct a social world in which international cooperation and interaction take place. That is, global governance is possible via international cooperation and interaction, which shape identities and interests of member states as argued by the constructivism (Finnemore and Sikkink 2001).

International Economic Variables and Economic Development

Regionalism is not the only determinant of economic development. Many other international economic variables could also affect it. Globalization is one of them.¹ There have been pros and cons of the role of globalization in enhancing economic growth and/or quality of life. Stiglitz (2003) was critical of globalization, as it has deepened global inequality between the haves and have-nots, especially in the less developed countries. Goklany (2007) argued for a positive effect of economic globalization based on free trade, and demonstrated that the free trade helped to enhance the human well-being. Foreign direct investment (FDI), a cross-border investment, is undeniably an important ingredient of economic globalization. Multinational corporations (MNCs) are international 'carriers' of the FDI. The role of MNCs in economic development in host countries, developing or developed, has nevertheless been controversial (Nunnenkamp and Spatz 2003).

Terms of trade, favorable or unfavorable, could also affect economic development. It is not necessarily the 'quantity' but the 'quality' ('terms') of trade that affects economic development. Unfavorable terms of trade will result in a negative or low economic growth particularly in developing countries, as they rely on the export of a single or a few primary commodities (Chow 1987; Appleyard *et al.* 2006: 214–215 and 416–417). External (foreign) debt sustainability, strong or weak, is assumed to affect economic development as well. The debt sustainability is an essential condition for economic development (Loser 2004).

Domestic Variables and Economic Development: Politics, Defense Spending, and Ethnic-Demographic Conditions

Russett (2005) found that democracies are considered efficient in generating wealth and economic growth, which also lessen the frequency of internal conflicts. The authoritarian political systems turn out to be more conflict-ridden than democratic counterparts and they lower the quality of life. The authoritarian political systems are unable to effectively manage external debt and foreign assistance as well. Many developing countries have imple-

¹ The globalization based on the KOF globalization index was used in this analysis. The KOF Index of Globalization was introduced in 2002. The KOF Index of Globalization measures the three main dimensions of globalization: economic, social and political. KOF index of globalization is released annually by the KOF Swiss Economic Institute (Dreher, Gaston, and Martens).

mented liberal economic reforms in recent decades. They have been successful in economic growth (*e.g.*, Chile, Brazil, *etc.*), yet there are still many other developing countries that remain poor and have not experienced any significant economic growth. While political liberalizations and reforms with minimal corruption are required for sustainable economic growth, China and Singapore, for example, with their respective 'authoritarian capitalism' have documented a rapid economic growth without undertaking significant political liberalization. South Korea was able to rapidly develop in the 1970s and 80s while its political system still remained authoritarian.

When inequality of income distribution is related to ethnicity, gender, or geographic region, Clemens (2007) argues that a stronger role for the state (*i.e.*, authoritarian political system) is advantageous for equal distribution of income, and the most vulnerable members of societies can be safeguarded by the role of stronger authoritarian government. Stiglitz (2003) argues that policies emanating from the Washington Consensus produce disappointing result as they are anchored in a free-market dogma, which ignores the unique socio-cultural contexts of countries where they are applied. The G20 group of governments agreed in 2010 on a 'new' Seoul Development Consensus. In contrast with the 'older' Washington Consensus, the Seoul Consensus allows a larger role for state intervention. Rather than seeking to impose a uniform top-down solution, the Seoul Consensus postulates that solutions should be tailored to the requirements of individual developing countries.²

A huge military spending disproportionate to the economic capacity is siphoning off the resources, which otherwise could have been used for economic growth and improvement of the quality of life (Sivard 1991). Some found the interaction between the defense spending and economic growth. Benoit (1978), basing on data on the 44 developing countries, argued that there is a positive correlation between military expenditures and economic growth over the period from 1950 to 1965. Klare (1987) demonstrates that every additional dollar spent on defense in developing countries reduces domestic investment by 25 cents and agricultural output by 20 cents. Their findings supporting the trade-offs were based on the Cold War period. Defense spending was still found to have a significant effect on the level of quality of life during the post-Cold war era. Countries with greater defense burden retain a lower quality of life regardless of population growth, urbanization and ethnic diversity (Kim 1996). Ethnic heterogeneity has been impeding the enhancement of quality of life (Collier 1999, 2007). Empirical evidences have shown that demographic variables such as ethnic composition (Alesina *et al.* 2003), urbanization (Todaro and Stephen 2009: 320–359) and population growth (McNicoll 1995) have significant effects on quality of life. What affects economic development is not only domestic but also international. In our study we will employ 'multiple' variables, domestic and international, including the regionalism. In order to identify an independent (*i.e.*, a 'pure') effect of regionalism on economic development, all other international and domestic variables assumed to affect economic development will be also controlled.

² The term Washington Consensus (1989) refers to market-friendly policies, which were generally advised and implemented both for advanced and emerging economies. It is also used to refer to economic reforms that were prescribed just for developing countries. In November 2010, the G20 group of governments agreed on a 'new' Seoul Development Consensus. The Seoul Development Consensus for Shared Growth is a set of principles and guidelines set up to assist the G20 nations and other global actors in working collaboratively with less developed countries in order to boost their economic growth and to achieve the UN's Millennium Development Goals (MDGs).

Methodology

Dependent Variable: Economic Development

Economic development was treated as dependent variable. Economic development incorporates not only economic growth (quantitative) but also standard of living (qualitative). PPP (Purchasing Power Parity) indicates the real GDP using a common set of international prices for all goods and services and provides more accurate comparisons of both economic growth and standard of living. Per Capita PPP was used to measure the economic development.

Independent Variable: Regionalism

The regionalism is based on the membership of each country with a regional intergovernmental organization or regional free trade agreements. The regionalism is measured by the affiliation of countries with each of the 14 regional intergovernmental organizations (RIGOs) or regional free trade agreements (RFTAs) selected. The affiliated countries are coded as 1, while others (non-affiliated) as 0. The regionalism is treated as a dummy variable. The major RIGOs and RFTAs, along with their respective regions, are as follows:

- ANDEAN (Andean Community of Nations: 4 countries) / South American region;
- APEC (Asia-Pacific Economic Co-operation: 21 countries) / Asia-Pacific region;
- ASEAN (Association of Southeast Asian Nations: 10 countries) / Southeast Asian Region;
- AU (African Union: 54 countries) / African region (note: South Sudan became the African Union's 54th Member on July 28, 2011 and the new country's data was not included in this analysis);
- CARICOM (Caribbean Community: 15 countries and dependencies);
- ECOWAS (Economic Community of West African States: 5 countries);
- EU (European Union: 27 countries) / European region;
- LAS (League of Arab States: 22 countries) / Arab region (Middle East);
- MERCOSUR (Common Southern Market: 4 countries);
- NAFTA (North America Free Trade Agreement: 3 countries) / North American region;
- OAS (Organization of American States: 35 countries);
- PC (The Secretariat of the Pacific Community or Pacific Community: 22 countries and territories);
- SAARC (The South Asian Association for Regional Cooperation: 8 countries) / South Asian region;
- SCO (Shanghai Cooperation Organization: 6 countries) / Central Asian region.

Control Variables

Both international economic variables and domestic variables were treated as control variables: globalization, terms of trade and external (foreign) debt sustainability are selected as international economic variables, while ethnic homogeneity, population growth, urbanization, types of political system and military expenses as domestic variables. Each of the eight control variables is also operationalized (measured) as follows:

- Globalization: it is based on the KOF Index of Globalization, which measures the three ('plural') dimensions of globalization: economic, social, and political (see Note 1 for the detailed measures of globalization).
- Terms of trade: the measure is based on the index of the price of a country's exports (benefits) in terms of its imports (costs).

- Debt sustainability: it is measured by per capita amount of external (foreign) debt divided by per capita amount of export. The large ratio means a weak sustainability, while the low ratio means a strong sustainability.

- Ethnic homogeneity: it is measured by percentage of the dominant ethnic-racial groups within each nation.

- Urbanization: the measure is based on urban-rural dichotomy; 'urban' refers to a group of allegedly nonagricultural pursuits while 'rural' to agriculturally oriented employment.

- Population growth: the natural increase per 1,000 of the population, based on the difference between birth and death rates of respective population.

- Types of political system: countries are classified as 'not free', 'partly free', and 'free' in terms of the degree of political freedom represented by both political rights and civil liberties. Countries with 'not free' were coded as 1 (highly authoritarian), 'partly free' as 2 (authoritarian), and 'free' as 3 (democratic).

- Military expenditure: the measure is based on military expenditure as a percentage of GDP.

The data on 217 countries are used in this analysis. The data cover the period from 2005 to 2011 depending on their availability for each and every of the countries. This study, for that matter, is not amenable to a time-series analysis but to a cross-national comparative analysis. A multiple regression analysis is used. The multiple regressions will test whether the regionalism affects economic development regardless of other international economic and domestic variables.

Results

Table 1. Multiple regression: Regionalism ALONE and economic development (per capita PPP)

	EU	AU	NAFTA	APEC	SAARC	SCO	LAS	ANDEAN	ASEAN	ECOWAS
Economic Development	<u>.366</u>	<u>-.549</u>	.122	<u>.181</u>	<u>-.135</u>	-.058	-.003	-.005	-.041	<u>-.343</u>
	MERCO-SUR	ANDEAN	OAS	CARICOM	PC					
Economic Development	.021	-.005	.094	.068	-.087					

Note: Standardized regression coefficients (beta) are presented and the underlined ones are significant at .05 level. All variables are log-transformed.

Source: Data from CIA, *World Factbook* (2007, 2008, 2009, 2010, 2011); Encyclopedia Britannica, Inc., *The Nations of the World / Britannica Book of the Year* (2007, 2008, 2009, 2010, 2011, Chicago: Encyclopedia Britannica); *Index* 2011 (URL: http://en.wikipedia.org/wiki/Quality-of-life_index).

Table 1 presents the regression analysis, which assesses the effect of regionalism on economic development. The Table (Regionalism ALONE) aims at assessing how regionalism 'alone' affects economic development. The finding demonstrates different effect of regionalism on economic development: positive, negative and no effects. Out of the 14 regionalisms, six (6) regionalisms such as EU, NAFTA, AU, APEC, SAARC and ECOWAS were found to have significant effects, positive or negative, on economic development; EU, NAFTA and APEC were found to have positive effects on economic development, while AU, SAARC and ECOWAS were found to have negative effects. But the remaining eight (8) regionalisms such as SCO, LAS, ANDEAN, ASEAN, MERCOSUR, OAS, CARICOM and PC were found to have no significant effects on economic development.

Table 2. Multiple regression/regionalism CONTROLLED: Regionalism and economic development controlling international economic and domestic variables

	AU	EU	ASEAN	NAFTA	APEC	CARICOM	OAS
Regionalism	-.166	.063	-.008	.089	-.008	.159	.101
Globalization	.196	.212	.223	.220	.222	.231	.223
Terms of trade	.178	.177	.183	.182	.184	.203	.196
Debt Sustainability	-.046	-.070	-.053	-.061	-.053	-.004	.052
Urbanization	.343	.373	.373	.362	.375	.399	.346
Ethnic homogeneity	.073	.150	.152	.155	.153	.150	.136
Population growth	-.215	-.176	-.212	-.214	-.212	-.216	-.246
Political system	.101	.111	.114	.108	.116	.084	.101
Military expenditure	.022	.027	.030	.031	.030	.062	.060
R square (%)	(76.3)	(75.0)	(74.8)	(75.6)	(74.9)	(77.0)	(75.6)
	SAARC	SCO	ANDEAN	LAS	ECOWAS	MERCOSUR	PC
Regionalism	.079	-.011	-.025	.051	-.136	-.033	-.127
Globalization	.238	.222	.219	.211	.216	.214	.214
Terms of trade	.177	.183	.186	.180	.164	.181	.182
Debt sustainability	-.059	-.052	-.050	-.048	-.038	-.050	-.080
Urbanization	.396	.376	.378	.369	.374	.384	.381
Ethnic homogeneity	.139	.153	.152	.145	.110	.158	.163
Population growth	-.214	-.213	-.209	-.229	-.196	-.211	-.193
Political system	.103	.111	.118	.127	.134	.115	.124
Military expenditure	.021	.028	.032	.013	.032	.025	.015
R square (%)	(75.4)	(74.9)	(74.9)	(75.0)	(76.3)	(74.9)	(76.3)

Note: Standardized regression coefficients (beta) are presented and the underlined ones are significant at .05 level. All variables are log-transformed.

Source: Data from CIA, *World Factbook* (2007, 2008, 2009, 2010, 2011); Encyclopedia Britannica, Inc., *The Nations of the World / Britannica Book of the Year* (2007, 2008, 2009, 2010, 2011); *Index 2011* (URL: http://en.wikipedia.org/wiki/Quality-of-life_index); http://www.economist.com/media/pdf/QUALITY_OF_LIFE.pdf.)

Multiple regressions in Table 2 (Regionalism CONTROLLED) assess whether the regionalism in Table 1 has significant ‘independent’ effect on economic development regardless of international economic and domestic variables, which are also assumed to affect economic development. Table 2 shows a ‘pure’ effect of regionalism on economic development when controlling the effects of international economic and domestic variables. The findings based on both Tables 1 and 2 indicate the following four different patterns of effect of regionalism (see Fig. 1 below) on economic development. The figure shows how the effect of regionalism on economic development changes between the ‘regionalism alone’ and the ‘regionalism controlled’.

Fig. 1. Different patterns of regionalism

<u>PATTERNS</u>	Regionalism <u>ALONE</u>		Regionalism <u>CONTROLLED</u>
<i>I. Spurious</i>	Significant	TO	Insignificant
<i>Regionalism</i>	EU/APEC (+)		(0)
	SAARC (–)		(0)
<i>II. Suppressed/Hidden</i>	Insignificant	TO	Significant
<i>Regionalism</i>	CARICOM (0)		(+)
	PC (0)		(–)
<i>III. Affective</i>	Significant	TO	Significant
<i>Regionalism</i>	AU/ECOWAS (–)		(–)
	NAFTA (+)		(+)
<i>IV. Non-Affective</i>	Insignificant	TO	Insignificant
<i>Regionalism</i>	SCO, OAS, LAS, MERCOSUR, AN- DEAN and ASEAN (0s)		(0s)

Note: (+) positive significant; (–) negative significant; (0) insignificant.

Each of the four different patterns is discussed as follows.

Pattern I. Some regionalisms, previously (see Table 1) found significant, were found to have no significant ‘independent’ effects on economic development. That is, once the effects of international economic and domestic variables are controlled, all of those significant effects of the regionalisms on economic development disappear.³ They are the EU, APEC and SAARC. Both the EU and APEC were previously found to have significant positive effects on economic development, while SAARC would have a negative effect.

³ It is very important to take into account at this point that the author speaks here about the disappearance of a significant impact of regional organizations of the first type in their mathematical model and not in reality. In no way this statement should be understood as claiming that such an impact existed sometime ago and later it disappeared. – *Editors*.

It was found that the original positive effects of the EU and APEC on economic development were a product of the effects of high globalization and favorable terms of trade as well as the effects of low population growth, high urbanization and ethnic homogeneity of individual member states. The positive effects were not a function of the collective institutional capacity of each of the two respective regional organizations. The original negative relationship between the SAARC and economic development was also a product of international economic variables featuring low globalization and unfavorable terms of trade as well as domestic conditions of low urbanization, high population growth and heterogeneous ethnic composition of individual member states. The SAARC was found to have no independent effect on economic development. In these three regionalisms, international economic and domestic variables of 'individual' member states make it difficult for the 'collective' regional organization to significantly affect economic development. The ability of the collective regional organization is constrained by the individual member states. The original significant, positive or negative, effects of the regionalism were found spurious. This pattern of regionalism is labeled as '*spurious regionalism*'.⁴

Pattern II. Some regionalisms were found to have no significant effects on economic development. But once the effects of international economic variables as well as domestic variables of the member states are controlled, the effect of regionalism on economic development appears significant, whether positive or negative. CARICOM was found to have a positive effect on economic development, while PC – the negative one (see also Tables 2 and 3). The change from insignificant to significant effects indicates that the original effects of the regionalism on economic development were suppressed (hidden). That is to say, the international economic variables such as economic globalization and terms of trade as well as domestic variables such as population growth, urbanization and ethnic composition were found to hide/conceal the 'true' relationship between regionalism and economic development. These are suppressor variables, concealing this true relationship. This pattern of regionalism is denoted as '*suppressed/hidden regionalism*'.

Pattern III. There are regionalisms whose effects on economic development remain unchanged regardless of international economic and domestic variables of the member states. They are the AU, ECOWAS and NAFTA. The AU and ECOWAS were previously found to have negative effects on economic development, while NAFTA's effect was positive. The significant negative effects of the two regional organizations in Africa (*i.e.*, of the AU and ECOWAS) on economic development remain unchanged regardless of international economic and domestic variables of the member states. Regardless of low globalization and unfavorable terms of trade as well as of low urbanization, high population growth, and heterogeneous ethnic composition of the member states associated with each of the two regional organizations, the institutional design of these two respective organizations was still found to have significant independent and negative effects on economic development. NAFTA was found to have positive, although weak, effect on economic development and the effect remains unchanged regardless of international economic and

⁴ Note that the author considers the regional organizations as units of his analysis. It is quite clear that if he studied, for example, the impact of the joining the European Union by individual countries on the economic development of particular countries, he would discover that this impact in many cases is rather significant. At such a level of analysis one would have to take into account many other factors not considered by the author – for example, the requirements that regional organizations impose on new members with respect to particular social, economic, and institutional indicators. – *Editors*.

domestic variables of the member states. This pattern of regionalism is labeled as '*affective regionalism*'.

Pattern IV. There are regionalisms whose effects on economic development remain solidly unchanged with their respective insignificant effects on economic development regardless the international economic and domestic variables of individual member states: they are the SCO, OAS, LAS, MERCOSUR, ANDEAN and ASEAN (see also Tables 2 and 3). These regional organizations were found incapable of affecting economic development, whether positively or negatively, under any international economic and domestic conditions of the member states. They are simply insignificant. This pattern of regionalism is labeled as '*non-affective regionalism*'.

The Effects of International Economic and Domestic Variables

Table 2 shows that regardless of any 'patterns' of regionalism discussed above, globalization was found to have strong and positive effects on economic development across all fourteen regionalisms. Regardless of regionalism, the favorable terms of trade in the member states were also found able to enhance economic development. External (foreign) debt sustainability, however, was found to have no significant effect on economic development, indicating that external debt, whether sustainable or unsustainable, is neither necessarily negative nor positive in affecting economic development. The effect of political system, democratic or authoritarian, on economic development is mixed. In the AU, EU, ASEAN, NAFTA, APEC, CARICOM, OAS, SAARC and SCO, the political system was found to have no significant effects on economic development, while the ANDEAN, LAS, ECOWAS, MERCOSUR and PC show that the more democratic political system, the higher economic development, yet the positive effect of political system on economic development was found relatively weak. Military expenditures were found to have no significant independent effect on economic development. Our findings do question a long-held view of the trade-offs, positive or negative, between the defense spending and economic development. Urbanization, ethnic homogeneity, and population growth were found to have significant independent effects on economic development. Regardless of regionalism, the more urbanized, ethnically homogeneous countries, which are also associated with a lower population growth, are likely to maintain a higher level of economic development than the rural, ethnically heterogeneous countries with a high population growth. The AU and ECOWAS in Africa, however, are exceptional in that their ethnic composition, heterogeneous or homogeneous, was found to have no significant effects on economic development regardless of their respective regionalisms.

Conclusions

The regionalism realized by the collective institutional design via regional organizations was found to depend from the conditions and constraints of individual sovereign member states. Collective regional/global governance as well as institutional capacity of the regional organizations was found to be dependent of the individual member states when affecting economic development. The effects of regionalism on economic development varied. Some regionalisms were found spurious or suppressed by the effects of conditions and constraints of the member states. Some regionalisms were found affective, indicating they are significant, positive or negative, in affecting economic development. But still many other regionalisms were found non-affective, indicating that they are simply insignificant

in affecting economic development regardless of international economic and domestic variables of the member states.

Regardless of regionalism, both globalization and favorable terms of trade of individual member state were found to have strong positive effects on economic development. The rapid population growth and heterogeneous ethnic composition have a negative effect on economic development, while urbanization has a positive effect. In some regionalisms, political democracy was found to have a positive effect on economic development, while many other regionalisms show that political democracy is not necessarily a significant determinant of economic development. The debt sustainability/unsustainability, as well as defense spending, was found to have no significant effect on economic development regardless of regionalism.

When/if regionalism via regional organization aims at enhancing the economic development, then the institutional capacity of regional organization based on the rules, norms and principles should be able to increase globalization as well as to produce favorable terms of trade for the member states. This is irrespective of the domestic socioeconomic, demographic and political conditions of the member states. Unless the regional organizations are institutionally capable of making their respective regionalism globalize beyond their internal integration and global/regional governance they aim, 'collective' regionalism alone is not likely to have a positive determining impact on economic development that 'individual' sovereign member states pursue.

References

- Abbot, K., and Snidal, D. 1998.** Why States Act through Formal International Organizations. *Journal of Conflict Resolution* 42(1): 3–32.
- Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., and Wacziarg, R. 2003.** Fractionalization. *Journal of Economic Growth* 8: 155–194.
- Appleyard, D. R., Field, A. J., Jr., and Cobb, S. L. 2006.** *International Economics*. 5th ed. New York: McGraw-Hill/Irwin.
- Benoit, E. 1978.** Growth and Defense Spending in Developing Countries. *Economic Development and Cultural Change* 26: 271–280.
- Chow, P. C. Y. 1987.** Causality between Exports Growth and Industrial Development: Empirical Evidence from the NICs. *Journal of Development Economics* 26: 55–63.
- CIA – Central Intelligence Agency 2007, 2008, 2009, 2010, 2011.** *World Factbook*. Washington, D.C.: Central Intelligence Agency.
- Clemens, M. A. 2007.** Smart Samaritans: Is There a Third Way in the Development Debate? *Foreign Affairs* 86: 132–140.
- Collier, P. 1999.** The Political Economy of Ethnicity. In Pleskovic, B., and Stiglitz, J. (eds.), *Annual World Bank Conference on Development Economics* (pp. 387–399). Washington, D.C.: World Bank Publications.
- Collier, P. 2007.** *The Bottom Billion: Why the Poorest Countries are Failing and What Can be Done about It*. New York: Oxford University Press.
- Finnemore, M., and Sikkink, K. 2001.** Taking Stock: The Constructivist Research Program in International Relations and Comparative Politics. *Annual Review of Political Sciences* 4: 391–416.

- Goklany, I. M. 2007.** *The Improving State of the World: Why We're Living Longer, Healthier, More Comfortable Lives on a Cleaner Planet.* Washington, D.C.: Cato Institute.
- Karns, M. P., and Mingst, K. A. 2010.** *International Organizations: The Politics and Processes of Global Governance.* 2nd ed. Boulder, CO: Lynne Rienner Publishers.
- Kim, H. S. 1996.** Trade-Offs between Military Spending, Quality of Life and Economic Growth. *Comparative Economic Studies* 38(4): 69–84.
- Klare, M. T. 1987.** The Arms Trade: Changing Patterns in the 1980s. *Third World Quarterly* 9: 1257–1281.
- Losser, C. M. 2004.** *External Debt Sustainability: Guidelines for Low- and Middle-Income Countries.* G-24 Discussion Paper 26. Geneva: UN Conference on Trade and Development.
- McNicoll, G. 1995.** Effects of Population Growth: Visions and Revisions. *Population and Development Review* 21: 307–340.
- Najam, A. 2003.** The Case against a New International Environmental Organization. *Global Governance* 9(3): 367–384.
- Nunnenkamp, P., and Spatz, J. 2003.** *Foreign Direct Investment and Economic Growth in Developing Countries: How Relevant are Host-Country and Industry Characteristics?* Kiel Working Papers 1176. Kiel: Institute for World Economics.
- Rosenau, J. N. 1995.** Governance in the Twenty-First Century. *Global Governance* 1(1): 13–43.
- Russett, B. 2005.** Bushwhacking the Democratic Peace. *International Studies Perspective* 6(4): 395–408.
- Sivard, R. L. 1991.** *World Military and Social Expenditures.* Washington, D.C.: World Priorities.
- Stiglitz, J. 2003.** *Globalization and Its Discontents.* New York: Norton.
- Todaro, M. P., and Stephen, C. S. 2009.** *Economic Development.* Boston: Pearson/Addison Wesley.
- Weiss, T. G. 2000.** Governance, Good Governance, and Global, Governance: Conceptual and Actual Challenges. *Third World Quarterly* 21(5): 795–814.

Africa and International Relations Theory: Acquiescence and Responses

Olukayode A. Faleye

The Westphalian narrative has been the compass of International Relations (IR). It sustains a Eurocentric hegemony in IR theory – ascribing to itself the nucleus of the international system. Indeed, international theory acts as a tool that legitimizes Anglo-American imperialism in international studies. For instance, colonization in Africa entails the force-feeding of African materials into the Western-centric structures. This phenomenon produced a distinct (hybrid) system with exotic challenges in Africa. The manifestation of these challenges in the decolonization process is often ignored in the neo-liberal, neo-realist and structural theories. This suggests a gap in the existing literature, especially in the area of conceptualizing Statehood, sovereignty, power, border, and security. This work canvasses interdisciplinary approach to the subject matter. Thus, using case study analysis, this paper argues that the Westphalian narrative lacks the understanding of the dynamics of contemporary African societies, and concluded by examining alternative pathways that can promote global understanding.

Keywords: African Studies, Global Studies, intellectual imperialism, International Relations Theory, state.

Introduction

The Westphalian narrative has been the guide of International Relations (IR). Consequently, the non-European world has been neglected through fabrications in Eurocentric texts. While the Westphalian European States were able to resolve the anarchical challenges through cultural reconstruction, the non-European cultures were often appraised based on the Eurocentric paradigms. Indeed, international theory acts as a tool that legitimizes Anglo-American imperialism in International Studies. For instance, colonization in Africa¹ entails the force-feeding of African materials into the Western-centric structures. This phenomenon produced a distinct (hybrid) system with exotic challenges in Africa. The manifestation of these challenges in the decolonization process is often ignored in the neo-liberal, neo-realist and structural theories. As Craig Murphy put it, ‘More than one out of ten people are African. More than one out of four nations are African. Yet, I would warrant that fewer than one in a hundred university lectures on International Relations given in Europe or North America even mention the continent’ (Murphy 2001: ix). This is not surprising, considering the annals of European imperialism in the continent – slave trade, colonialism and neo-colonialism. The Afro-European relations since the fifteenth century

¹ Note that ‘Africa’ throughout this article refers mostly to Sub-Saharan Africa.

have been colored by European dominance and characterized by the mythologies of African inferiority (Ofonagoro 1980: 58–59; Awolowo 1977: 18–21). Consequently, many Eurocentric scholars often ignore the African contribution to the field. This was an attempt to justify the western centric hegemony in world affairs.

The decolonization process in Africa involved an attempt at political, economic and intellectual emancipation of the African people. Intellectual decolonization in Africa involved the review of the colonial curriculum to accommodate the African experience. For example, a review of academic curriculums pioneered in the field of History led to the development of the subfield of African History despite stiff opposition from Eurocentric historians. The decolonization of intellectual materials is a continuous process, and the failure of the existing Eurocentric outlook to comprehend the African experience necessitated a review of the existing IR paradigms to enhance global understanding. This work canvasses interdisciplinary approach to the subject matter. Thus, using case study analysis, this paper argues that IR theory lacks the understanding of the dynamics of contemporary African societies, and concluded by examining alternative path ways that can promote global understanding.

This paper is divided into four sections. The first is this introductory section followed by the conceptual framework for the analysis, while the third section examines the contributions of Africa to IR theory; the concluding section summarizes the analysis and offers clues to further studies.

Mapping Intellectual Imperialism

Imperialism is multidimensional involving the subjugation and exploitation of a people by another. The elements of imperialism can be divided into three major categories – exploitation, cultural domination, and intellectual rationalization (Atalas 2000: 23–25; Mudimbe 1988: 2). In this regard, imperialism involves the exploitation of the human and natural resources of a society by another. It entails the bastardization of the colonized culture and an attempt to replace it with that of the colonialist. The exploitation and domination that are inherent in imperialism are often justified within an intellectual framework of the colonialist. Political and economic imperialism in Africa involved the integration of the continent into the Eurocentric political, economic and social system. In this respect, Africa became the source of raw materials and market for European industries. Its pre-colonial political institutions were made subservient to Western European democratic governance, while its culture was eroded by Western centric values. Scholars have argued that this phenomenon impeded the development of the continent (Awolowo 1977: 28–29; Rodney 2012: 17–31). The themes of political and economic imperialism in the history of Afro-European relations are widely documented and need not bother us in this study. However, this paper takes a departure from the traditional perspective of imperialism which lays emphasis on the political and economic dimension of imperialism. It examines the dynamics of intellectual imperialism in Africa with a special concern about its impact in international studies.

Intellectual imperialism is the unjustified tendency of the intelligentsia to ignore alternative theories, perspectives, or methodologies (Jussim 2002: 18). Indeed, intellectual imperialism is a shared fate of all colonized people. Ward Churchill reminds us about the curriculum challenges in the post independent United States. According to Churchill:

The American educational system as a whole seems hopelessly locked into a monolithic European paradigm in terms of acknowledgeable heritage, methodology, and conceptual structure... Reliance upon a monocultural tradition within a multicultural arena constitutes an essentially transparent form of intellectual domination, achievable only within the power context of parallel forms of domination (Churchill 1981: 51).

Colonialism involves both the material and intellectual subjugation of the colonized. The Europeans armed with Eurocentric pedagogies planted Western education vis-à-vis Christianity in Africa. Consequently, for a period of about 100 years after the British bombardment of Lagos (1851), the continent applied the Eurocentric educational curriculum hook-line and sinker. This era witnessed the writing of 'African History' through the lenses of European traders, missionaries, travelers, and adventurers, who sought to justify European imperialism in Africa. For instance, the Regius Professor of Modern History at Oxford University, Professor Hugh Trevor-Roper asserts:

Perhaps, in the future, there will be some African History to teach. But at present there is none: there is only the history of the Europeans in Africa. The rest is darkness... and darkness is not a subject of history. Please, do not misunderstand me. I do not deny that men existed even in the dark countries and dark centuries, nor that they had political life and culture, interesting to sociologists and Anthropologists; but History, I believe, is essentially a form of movement, and purposive movement too. It is not a mere phantasmagoria of changing shapes and costumes, of battles and conquests, dynasties and usurpations, social forms and social disintegration (Trevor-Roper 1963: 871 cited in Fage 1981: 31).

This Eurocentric view of African History was conceived out of the desire to justify European imperialism in the continent (Fage 1981: 32). In this period, the history of the world was viewed through the Eurocentric lenses of the colonialists. This was exemplified by the text of the *Cambridge Modern History*, Volume 14 published between 1902 and 1910. Describing the content of this volume, Fage lamented 'This is Eurocentric to the point at which it almost totally ignores even European activities in the outside world' (*Ibid.*: 33).

The emergence of African History as a field of historical inquiry gained momentum with the rise of African nationalism after the World War II. It was an attempt at intellectual decolonization of the African past. The authentication of non-written sources such as, African oral tradition was promoted through the convergence of historical and cultural disciplines – History, Archaeology, Anthropology, Linguistic and Art History under the umbrella of African Studies. Today, African History is a celebrated discipline in the world of academia. Amongst others, African historiography has enriched historical methodology by extending the scope of the discipline to encompass the Eurocentric sacred writings and oral tradition. Also, prior to the eighteenth century, African arts were regarded as primitive objects and products of a barbaric culture (Mudimbe 1988: 10). It is interesting to note that by the twentieth century, African arts have strongly influenced European arts as exemplified by the works of Pablo Picasso and Henri Matisse. This shows a transition from an unproductive ethnocentric standpoint to an objective paradigm in the discipline of History and Art History.

The most enduring colonial institutions in Africa are the Universities. The African nationalists failed to domesticate Western education to soothe the yearnings of the African environment. Thus, the post-independence period witnessed a continuous dependence of the African universities on European structures (Mazrui 2003: 141–142). These universi-

ties remain the agent of neo-colonialism in Africa. Most university teachings, research and reading texts emphasize western philosophies and Eurocentric realities. European languages became the language of prestige while the African languages were relegated as vernacular (with a salient exception of Swahili in East Africa). The university curricular reflected the western experience (Mazrui 2002: 68–69). For instance, the National University Commission (NUC) is empowered by the Decree (Acts) No. 16 of 1985 and Decree (Acts) No. 48 of 1988 to administer a minimum standard for all programs taught in Nigerian Universities (NUC-Benchmark for Undergraduate Programs in Nigerian Universities 2007: i–ii). An analysis of the NUC Benchmark Minimum Academic Standards (BMAS) for the undergraduate program in International Relations reveals that out of 45 courses offered, only six (that is IRS103, IRS308, IRS309, IRS402, IRS409, and IRS411) reflect the African experience, others are rooted in the Eurocentric school of thought (Table 1).

Table 1. NUC-benchmark minimum academic standard for international relations' program

S/N	COURSE CODE	DESCRIPTION	CREDIT UNITS
1	2	3	4
	100 LEVEL	100 LEVEL	
1	IRS 101	Ancestors of the Contemporary Intl' System	2
2	IRS 102	Evolution of the Contemporary Intl' System	2
3	IRS 103	Introduction to African Politics	2
4	IRS 104	History of Europe 1300–1914	2
5	IRS 105	History of Europe 1300–1914 II	2
6	IRS 106	Introduction to Management	2
7	IRS 107	Introduction to Political Science	2
		200 LEVEL	
8	IRS 201	Use of English	2
9	IRS 202	Structure of International Society	2
10	IRS 203	Introduction to Political Analysis	2
11	IRS 204	Political Thought Plato-Machiavelli	2
12	IRS 205	Political Thought Since Hobbes	2
13	IRS 206	Foundation of Political Economy	2
14	IRS 207	New States in World Politics	2
15	IRS 208	Nigerian Politics	2
16	IRS 209	French / Portuguese / Arabic	2
17	IRS 210	Elements of Contemporary Global Studies	2
		300 LEVEL	
18	IRS 301	International Economic Relations I	2
19	IRS 302	International Economic Relations II	2
20	IRS 303	The International Political System	2
21	IRS 304	Diplomacy	2
22	IRS 305	Law of Nations	2
23	IRS 306	Logic and Methods of Political Inquiry	2
24	IRS 307	International Politics in the Post-Cold War Era	2
25	IRS 308	International Politics of Africa	2
26	IRS 309	Field Trip	2
27	IRS 310	Theories of International Relations	2
28	IRS 311	Theory and Practice of Administration	2

1	2	3	4
		400 LEVEL	
29	IRS 401	Foreign Policy Analysis	2
30	IRS 402	Nigerian Foreign Policy	2
31	IRS 403	Human Rights	2
32	IRS 404	Contemporary Strategic Studies	2
33	IRS 405	Foreign Policies of the Powers	2
34	IRS 406	International Institutions	2
35	IRS 407	Research Project	6
36	IRS 408	Race and Ethnicity in International Relations	2
37	IRS 409	Africa and the Middle East	2
38	IRS 410	Asia in World Politics	2
39	IRS 411	International Relations in Southern Africa	2
40	IRS 412	Europe in World Politics	2
41	IRS 413	Technology, Ecology and Environment in IR	2
42	IRS 414	IR in North Africa and the Maghreb	2
43	IRS 415	Politics of Intl' Economic Relations	2
44	IRS 416	The Intl' Politics of Mass Communication	2
45	IRS 417	Middle East in World Politics	2

Source: National University Commission 2007: 96–101.

In this circumstance, the products of the IR program are automatically dislocated from the realities on the ground in Africa. While the African experience showcases the supremacy of the informal non-state cross-border relations in the region, the leading scholars in the field continued to ignore the phenomenon. In this purview, the western-centric hegemony in international studies is a form of intellectual imperialism – a closed system with subjective paradigms. Thus, this paper attempts to fill the gap in the existing literature by examining how the ‘African antithesis’ can help expand the existing monolithic paradigms of International Relations to reflect global understanding.

African International Relations: Challenges and Prospects

The peace of Westphalia marked a departure from the traditional religious aristocracy of medieval Europe. Its resolutions concluded the internecine wars and evolved a geopolitical framework for European relations. IR theory is rooted in the treaty of Westphalia. The Westphalian order was established on two major principles – sovereignty and equality of states. Indeed, it emphasizes the supremacy of the nation state in the international system; State-centric International Relations evolved as a solution to the cycle of European hostilities and political disorder. This Eurocentric philosophy was later planted around the world through colonialism.

The Afro-European intercourse during the colonial era involved the subjugation of traditional African International Relations and the formalization of European type international order. This entails the force-feeding of African materials into the European structure. Notwithstanding, the informal transnational African politics continued to flow as a vital under-current – the nucleus of the postcolonial African International Relations. This undercurrent in the form of informal regional politics characterized by failed borders, and incoherent sovereignty is what Lisa Anderson regarded as alternatives to the states. According to Lisa Anderson, ‘Many of these alternatives, vast religions and ethnic networks... compete with the state and while they may convey fewer rights than established states, they

often protect those rights they do extend far more effectively' (Anderson 2004: 3). The post-colonial period therefore, marked a rebirth of a new Africa in form of distinct hybrid states that are neither European states nor pre-colonial African kingdoms in character.

The African deviancy to the state centric perspective of International Relations can only be understood through an appraisal of the pattern of intergroup relations in Sub-Saharan Africa. The integration between the peoples of West Africa goes beyond trading and involved transnational kinship. The scramble and partition of Africa involved the demarcation of the continent across established ethnic nationalities. For example, in Nigeria, the Hausa pre-colonial state was divided between Nigeria and Niger, the Yoruba people were divided between Nigeria, Benin and Togo, while the Fulani people were divided across the Nigeria-Cameroonian border axis. The new created states were never a nation-state. This phenomenon created social capital across African colonial boundaries. Also, it created social solidarity across borders which serve as a platform for disloyalty to the hybrid states. A major challenge to state planting in Africa is the fluidity of the colonial boundaries. As the concept of sovereignty connotes the formalization of national boundaries, according to Robert Rotberg, states 'constituted repositories of power and authority within borders' (Rotberg 2004: 28). Hence, the erosion of this power across the inherited colonial boundaries owing to uncontrollable informal large scale trans-border movements is contrary to the Westphalian model. It is not surprising therefore, that as of the late twentieth and early twenty-first century this scenario was accelerated by the de-bordering forces of globalization.

This phenomenon created channels of power for transnational non-state actors. The result was the rise of transnational militia networks comprising the Al Qaeda in the Islamic Maghreb (AQIM), Boko-Haram in Nigeria, Lord's Resistance Army (LRA) in the Central African Republic, Janjaweed in Chad, and the Arab Islamic Front of the Azawad in Mali. These militia groups have seized the opportunity created by the rapid erosion of power across the national boundaries to challenge the state actors. While the security architecture of Africa is unfolding, informal trans-border trade is exceedingly high in Africa, starving the states of vital revenue, and strengthening the economic power base of the transnational non-state actors (Delvaux 2001: 13–17). According to Christopher Chase-Dunn, this is a response to the globalization of Western neoliberal democracy and its attendant stress on the World's proletariats (Chase-Dunn 2010: 51). Considering the foregoing, it can be deduced that informal trans-border relations in Africa exceed formal International Relations by state actors. This scenario challenges the use of state as a major unit of analysis in Africa. Also, this shows that the functioning of the political entity referred to as 'states' in Africa differs considerably from what constitutes a state in Europe. Indeed, this dichotomy is a major challenge to the existing state-centric theory of International Relations. Observing this phenomenon, Justin Rosenberg posits:

The disciplinary division of labor between the modern social sciences itself reflects uncritically and thereby naturalizes the distinctive social forms of modernity. State, markets, individuals – precisely the things we need to explain – are already assumed to be natural starting points. By conceptualizing particular structures of modern social relations in isolation from each other, this division of labor tends to reify them into self-sufficient actors with their own distinctive properties – hiding both the historical novelty of these forms and the specific social relations which constitute them. And it almost goes without saying that this also effects an ideological closure, drawing in of the horizons of collective human possibility (Rosenberg 1994: 4).

The failure of IR theory to reflect issues in African studies is no longer news. Scholars have rejected the static and mono-cultural conception of IR theory, pointing to the constructivist advances as an outreach to Africa and other non-Western cultures (Price and Reus-Smit 1998: 266; Brown 2006: 125). Constructivists have been preoccupied with the social construction of International Relations with a special focus on trans-border socio-cultural relations. This seems to hold promise for the understanding of the African informal transnational undercurrent. According to Brown:

If IR theory presupposes functioning states and these do not exist in parts of Africa, then the IR theory cannot apply; if IR theory is focused on relations between states, and there are international social processes crossing state borders that are in some sense, non-state, then alternative theories are needed, and so on (Brown 2006: 123).

Brown admitted that IR theory like other theories is limited in scope. He argues that 'they reduce the complexity of the world in order to highlight certain important features... they rely on conceptual abstractions such as 'state' and 'anarchy' to refer to real aspects of the world but in a necessarily imperfect, generalized way' (*Ibid.*: 124). Advancing this discussion, it can be deduced that the problem lies with the disciplinary philosophy of International Relations. This is obvious in the concept of what constitutes the 'international' and the 'transnational', for African challenges to IR theory is embedded in the informal transnational relations fiercely competing with the formal state-centered International Relations. In this perspective, the 'international' that is, state-centered relations are the foundation of IR theory and fits well into the European reality while the African experience emphasizes the 'transnational' which focuses on non-state relations involving a de-bordering process. In this purview, antagonists of the African challenge to IR may be justified if the discipline continues to be defined from the Eurocentric viewpoint. In this regard, IR theory will be extremely handicapped to explain the African situation and the continent will continue to be ignored in the discipline as a precaution against theoretical complications. Hence, the inadequacy of IR theory to diagnose the African dilemma is inherent in the discipline. A call for a distinct framework outside of the mainstream IR theory to address the African phenomenon is a call to liquidate the discipline and the constructivist agenda is a step towards this direction. No wonder, many IR scholars are restricting a shift away from the fundamental IR theory for self-preservation. Apart from the Africa's challenge to International Relations, the emerging pattern of globalization poses a major threat to the field. The state-centric explanation to the global intercourse can no longer stand the complexity of the emerging world order. It seems that the establishment of Global Studies as a distinct discipline is a reaction to the narrowness of IR theory. As Phyllis Pomerantz puts it:

IR has increasingly dealt with voluntary associations of states (international organizations) and non-state actors, such as private companies, terrorist groups, and non-governmental organizations. Nonetheless, much of the analysis still revolves around the relationships of those actors with the state. In contrast, the state is only one of multiple units of analysis used in Global Studies. Perhaps the best characterization of those units is that of informal and formal networks of groups of individuals and organizations linked to each other and to the global economy and polity (Pomerantz 2008).

Indeed, Global Studies (GS) offers a broader framework for the analysis of the African experience. The transition in world history necessitates a transition of IR theory from

a state-centric pedagogy to a holistic transnational global framework as exemplified by the experience of the Global South. Unfortunately, the discipline of International Relations is fundamentally subjective, ethnocentric and therefore imperialistic. It cannot expand its theoretical basis without self-liquidation. This circumstance is what Rodrigue and Stasko (2010: 132), refers to as 'social entropy' – 'the result of generations of people thinking in traditional ways. IR is entrenched in the state system, even while other units of analysis are involved, the state remains dominant. The failure of state planting in Africa vis-à-vis other parts of the Global South rubs International Relations of its universality. Also, the emerging globalization phenomenon, I bet, will continue to erode its foundation in the West – its stronghold. International Relations evolved out of the Western hegemony in world affairs. Its preferences are the great power politics which necessitated the treatment of the colonized Global South as the world's periphery. However, the challenges of International Relations came with decolonization and the failure of the Westphalian state system in post-colonial Africa. This transition in world history poses a potent challenge to the mainstream IR theory, as the concept of an all sovereign state becomes untenable in Africa and elsewhere in the Global South. Unfortunately, IR is genetically conditioned to be Eurocentric and the failure of this mirage necessitated the decline of the discipline. This frustration is exemplified by the writing of William Brown who tends to redefine International Relations away from the state-centric debacle. Borrowing a phrase from Justin Rosenberg's 'The Empire of Civil Society'; Brown agreed that emphasis on critical social theory should be restricted within the discipline, otherwise International Relations will 'disappear into Sociology' (Brown 2006: 124–125). Hence, for self-preservation, International Relations could only survive by assigning nuisance value to realities in non-European cultures, especially when such contribution conflicted with its cardinal doctrines. Alternatively, in the quest for objectivity and global outlook, International Relations will inevitably dissolve into Global Studies (GS).

The existing IR theory despite its narrowness represents a first but an incomplete step towards holistic global understanding. It is now being expanded to accommodate experiences of non-European regions within the expansive theoretical framework in Global Studies. Thus, Global Studies represents a new and broader branding of International Relations. According to Rodrigue and Stasko:

It is our job as academics to begin transformation towards new models. We, as scholars and educators, must find ways to address global problems using global linkages between ourselves, our students and our communities. It is commonly reported that when our cosmonauts and astronauts went into space, they saw no political boundaries on the Earth and came back confirmed internationalists and activists. It is in this spirit of global endeavor that we educators need to ignite world change by empowering our world citizens with new ideas (Rodrigue and Stasko 2010: 139).

Thus, in order to involve the African experience into Global Studies, it becomes necessary to re-conceptualize existing paradigms of IR such as state, sovereignty, power, and border to reflect the African scenario. In this regard, IR theory will converge with African Studies (AS) to produce a new knowledge. According to Hegel, the steps towards the discovery of a truly scientific knowledge involve the development of a thesis, antithesis and a synthesis. In this perspective, the Eurocentric IR theory represents the thesis, regional studies such as African studies constitute the antithesis and, a critical appraisal of the two stages of enquiry will produce the synthesis – a holistic and universal Global Theory.

Conclusion

European Imperialism in Africa involved the political, economic and intellectual domination over the African people. The disadvantaged position of Africa in the history of Afro-European relations made the continent subservient to Eurocentric ideologies. It was discovered that decolonization in Africa is an ongoing process which entails an attempt at political, economic and intellectual liberation of the continent. Intellectual decolonization of the continent started with the review of Academic curricular in the field of History and now International Relations (IR). The lessons learnt from the decolonization of the field of History in Africa suggest that the successes recorded can be attributed to the elastic philosophy of history that cuts across all human cultures. In the case of International Relations, the discipline is deeply entrenched in the Eurocentric experience; it is an invention of Europe. Its cardinal doctrines of the superiority of state are a political bible of the West and any challenge from Africa or elsewhere in the Global South to the status quo is deemed heretic. No wonder, renowned IR scholars have treated the Africa's challenge to International Relations passively and with disdain. In a nutshell, the limitation of the discipline to answer the African question is inherent in its genetics – its philosophy cannot accommodate such defiance. To do otherwise, is to face theoretical complications and risk the liquidation of the discipline as whole. However, it was discovered that it may be possible to expand the pioneering paradigms in International Relations to accommodate African realities within the disciplinary philosophy of Global Studies (GS). This should be done by re-conceptualizing cardinal concepts of International Relations such as statehood, sovereignty, power, and border within a global framework.

References

- Anderson, L. 2004.** Antiquated Before They Ossify: States that Fail Before They Form. *Journal of International Affairs* 58(1): 1–16.
- Atalas, S. H. 2000.** Intellectual Imperialism: Definition, Traits, and Problems. *Southern Asian Journal of Social Sciences* 28(1): 23–45.
- Awolowo, O. 1977.** *The Problems of Africa: The Need for Ideological Re-appraisal*. Kwame Nkrumah memorial lecture series. London: Macmillan.
- Brown, W. 2006.** Africa and International Relations: A Comment on IR Theory, Anarchy and Statehood. *Review of International Studies* 32: 119–43.
- Chase-Dunn, C. 2010.** Globalization from Below: Toward a Democratic Global Commonwealth. *Journal of Globalization Studies* 1(1): 46–57.
- Churchill, W. 1981.** White Studies: The Intellectual Imperialism of Contemporary Western Education. *Equity and Excellence in Education (Routledge)* 19(1–2): 51–57.
- Delvaux, E. 2001.** The Challenge of the Informal Economy. In Manuel, S. V. (ed.), *The Challenge of Globalization in Africa: The Trade Union Response* (pp. 13–17). Labour Education 123. Geneva: ILO.
- Fage, J. D. 1981.** The Development of African Historiography. In Ki-Zerbo, J. (ed.), *General History of Africa I: Methodology and African Prehistory* (pp. 26–40). Paris and London: UNESCO and Heinemann.
- Jussim, L. 2002.** Intellectual Imperialism. *Dialogue, the Newsletter of the Society for Personality and Social Psychology* 17(1): 18–20.

- Mazrui, A. A. 2002.** African and Culture of Dependency: The Case of African University. In Rene, L. and Fouad, K. (eds.), *Africa and Other Civilizations: Conquest and Counter Conquest* (pp. 58–93). London: Africa World Press.
- Mazrui, A. A. 2003.** Towards Re-Africanizing African Universities: Who Killed Intellectualism in the Post-colonial era. *Alternatives: Turkish Journal of International Relations* 2(3–4): 135–163.
- Mudimbe, V. Y. 1988.** *The Invention of Africa: Gnosis, Philosophy, and the Order of Knowledge*. Bloomington and Indianapolis: Indiana University Press.
- Murphy, C. 2001.** Foreword. In Dunn, C. K., and Shaw, M. T. (eds.), *Africa's Challenge to International Relations Theory*. Basingstone: Palgrave.
- National University Commission. 2007.** *Benchmark Minimum Academic Standards for Undergraduate Programmes in Nigerian Universities (Social Sciences)*. Abuja: National University Commission (NUC).
- Ofonagoro, W. I. 1980.** The African Presence in North America. In Ranger, T. O, Jones, A. B., Ogot, B. A., Mahoney, F., Omer-Cooper, J. D., Boahen, A. A., Kiwanuka, M. S., and Pankhurst, R. (eds.), *Tarikh 20 – The African Diaspora* (pp. 56–78). London: Longman.
- Pomerantz, P. 2008.** International Relations and Global Studies: The Past of the Future? *Global-e: A Global Studies Journals*, 2008. URL: <http://global-ejournal.org/2008/08/29/international-relations-and-global-studies-the-past-of-the-future/>.
- Price, R., and Reus-Smith, C. 1998.** Dangerous Liasons? Critical International Theory and Constructivism. *European Journal of International Relations* 4(3): 259–294.
- Rodney, W. 2012.** *How Europe Underdeveloped Africa*. Capetown, Dakar, Nairobi – Oxford: Faham/Pambazuka Press and CODESRIA.
- Rodrigue, B. H., and Stasko, D. J. 2010.** Changing the Future with the Past: Global Enlightenment through Big History. *Journal of Globalization Studies* 1(2): 128–146.
- Rotberg, I. R. 2004.** The Failure and Collapse of Nation-States: Breakdown, Prevention and Repair. In Rotberg, I. R. (ed.), *When States Fail: Causes and Consequences* (pp. 1–49). Princeton NJ: Princeton University Press.
- Rosenberg, J. 1994.** *The Empire of Civil Society: A Critique of Realist Theory of International Relations*. London: Verso.

Part III. GLOBAL TRENDS AND PERSPECTIVES

Advances in Development Reverse Global Inequality Trends*

Andrey V. Korotayev and Victor De Munck

In recent decades countries have gone through unprecedented growth in human development. In 1980, there were two countries with a human development index near to or higher than 0.90, now there are 22. It is a well-established fact that growth in human development is positively related with economic growth. Largely as a result of this correspondence, Ranis posited a positive feedback loop between countries with high economic growth and human development (a 'virtuous cycle') and countries with stagnant or negative economic growth and human development (a 'vicious' cycle). Using longitudinal statistical analysis we show that there is an 'old model' of the relationship between human development and economic growth that supports the existence of these cycles and a 'new model' that refutes them. This is good news since the vicious-virtuous cycles imply that the rich get richer and the poor get poorer whereas the 'new model' shows a conditional and eventual absolute convergence between rich and poor countries in terms of human development. We show that this change is due to two factors: The rise in middle and high developed countries and the high rates of economic growth and human development among somewhat poor and mid-level countries. Our findings correspond to those published in Nature by Myrskylä, Kohler and Billari (2009) demonstrating that for countries at the high end of the human development index (HDI), between 0.85 and 0.95, there occurs a reversal of the previously well-established negative, development-fertility relationship. Our research, supportive of Myrskylä et al.'s findings, demonstrates a more complex relationship between HDI and economic growth rates than previously thought and that socio-cultural factors independent of economic or human development should be taken into account to construct a fuller model of rates of change in economic and human development.

Keywords: *global inequality, human development, economic growth, convergence.*

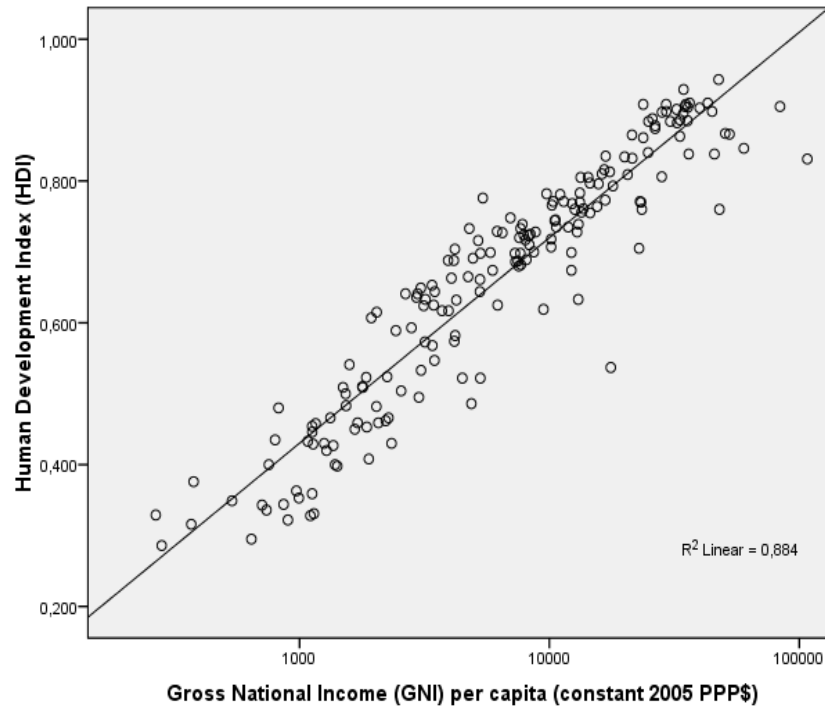
The relationships between human development and economic growth have already been a subject of substantial research (Sen 1985, 2000; Streeten 1994; Ramirez, Ranis, and Stewart 1998; Boozer *et al.* 2003; Ranis 2004; Afzal *et al.* 2009; Özcan and Bjørnskov 2011; Conceição, Mukherjee, and Nayyar 2011; Cox, Arkoubi, and Estrada 2006; Poveda 2011; Tridico 2007). The main findings of this research may be summarized as following.

* This research has been supported by the Russian Foundation for the Humanities (project No. 14-02-00330).

Economic growth is positively related to human development; it is one of its major determinants (Ramirez, Ranis, and Stewart 1998: 3–8; Boozer *et al.* 2003; Ranis 2004, *etc.*).

Indeed, logarithm of per capita gross national income correlates almost perfectly with the Human Development Index (HDI) values (see Fig. 1).

Fig. 1. Correlation between decimal logarithm of per capita national income (in 2005 PPP \$) and the Human Development Index for 2011

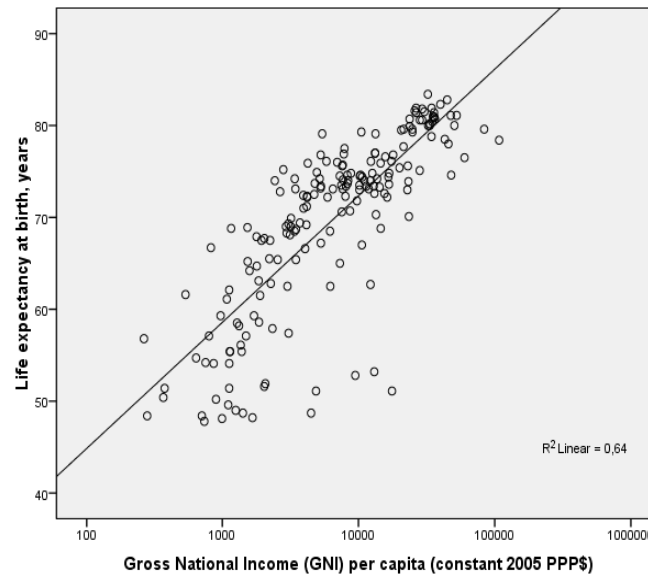


Note: $r = 0.940$, $p < 0.0001$, $R^2 = 0.884$. Data source: Klugman 2011: 127–130.

Of course, there is a substantial degree of autocorrelation here, as per capita GNI is one of four components that are used for the HDI calculation according to the current methodology (Klugman 2011: 167–173).

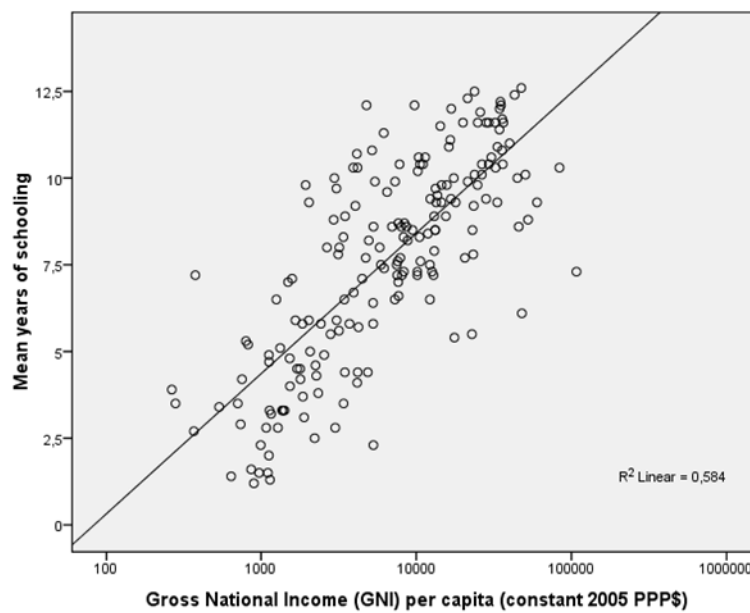
However, the economic prosperity (measured through per capita GNI) also demonstrates very strong correlations with all the other HDI components – life expectancy at birth, mean years of schooling, and expected years of schooling (see Figs 2–4).

Fig. 2. Correlation between decimal logarithm of per capita national income (in 2005 PPP \$) and life expectancy at birth for 2011



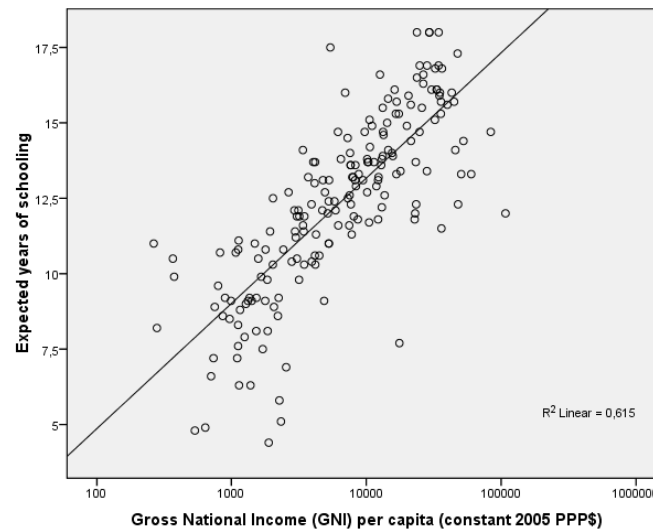
Note: $r = 0.800$, $p < 0.0001$, $R^2 = 0.640$. Data source: Klugman 2011: 127–130.

Fig. 3. Correlation between decimal logarithm of per capita national income (in 2005 PPP \$) and mean years of schooling for 2011



Note: $r = 0.764$, $p < .0001$, $R^2 = 0.584$. Data source: Klugman 2011: 127–130.

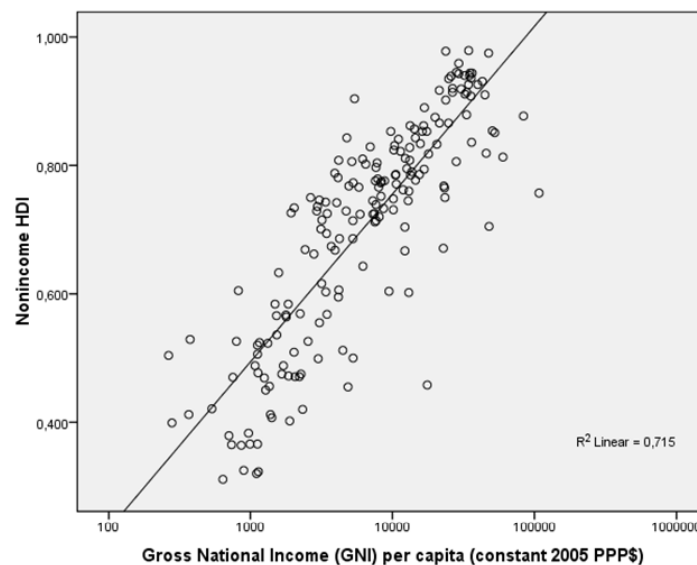
Fig. 4. Correlation between decimal logarithm of per capita national income (in 2005 PPP \$) and expected years of schooling for 2011



Note: $r = 0.784$, $p < 0.0001$, $R^2 = 0.615$. Data source: Klugman 2011: 127–130.

It also demonstrates an even stronger correlation with ‘nonincome HDI’ (computed on the basis of human development subindices excluding per capita GNI; hence, in this case all the autocorrelation present in the first correlation above [Fig. 1] is eliminated, see Fig. 5).

Fig. 5. Correlation between decimal logarithm of per capita national income (in 2005 PPP \$) and the ‘nonincome’ Human Development Index for 2011



Note: $r = 0.846$, $p < 0.0001$, $R^2 = 0.615$. Data source: Klugman 2011: 127–130.

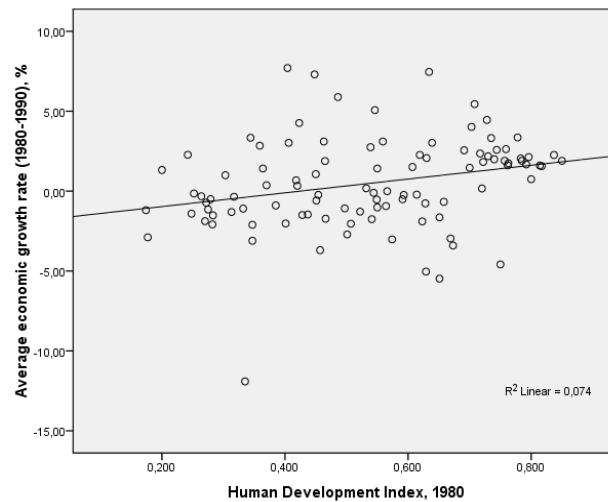
In general, there is a strong consensus that economic growth tends to affect human development positively. 'Income growth clearly strikes one as the main contributor to directly increasing the capabilities of individuals and consequently the human development of a nation since it encapsulates the economy's command over resources' (Ranis 2004: 3; see also Sen 2000). For example, while the citizens of the Indian state of Kerala have life expectancies and literacy rates comparable to those of many developed countries, the fact that they cannot enjoy many of the benefits of citizens of such countries (such as better housing, transportation, or entertainment) demonstrates the importance of GDP as an instrument for achieving a wide range of capabilities. Many researchers have observed the importance of higher income 'facilitating achieving crucial human development objectives' as well as having 'an indirect effect on human development' (Ranis 2004: 3; see also, *e.g.*, Afzal, Butt, and Rehman 2009; Dash and Sahoo 2010; Dao 2011; Alderman *et al.* 1996; Moore 2006, *etc.*).

On the other hand, it has been shown that human development also has a positive effect on economic growth. Indeed, as people become healthier, better nourished and educated they contribute more to economic growth. Higher levels of HD are not only an end in themselves but also indirectly effect economic growth by enhancing people's creative and productive capacities (see Ramirez, Ranis, and Stewart 1998: 9; Ranis, Stewart, and Samman 2006; Korotayev, Malkov, and Khaltourina 2006; Cox, Arkoubi, and Estrada 2006; Korotayev 2009; Afzal *et al.* 2009; Özcan and Bjørnskov 2011; Poveda 2011; and Tridico 2007 for evidence supporting the positive influence of human development on economic growth).¹

The above discussion suggests that we should expect a positive correlation between Human Development Index values and economic growth rates. If we take a closer look at the relationship between HDI and economic growth rates longitudinally, by decades and five-year periods, we see that the predicted positive correlation holds up for the 1980s (see Fig. 6).

¹ In fact, Ranis and his colleagues (Ramirez, Ranis, and Stewart 1998: 3–8; Boozer *et al.* 2003; Ranis 2004; Ranis, Stewart, and Samman 2006) demonstrate that the positive influence of human development on economic growth, on the one hand, and the positive influence of economic growth on human development, on the other hand, tend to form positive feedback loops that could result both in virtuous (more human development – faster economic growth – acceleration of human development – even faster economic growth) and vicious (decline of human development – decrease of per capita incomes – further decline of human development – a continuing decrease in per capita incomes – an accelerated decline of human development) cycles.

Fig. 6. Correlation between Human Development Index and Average Growth Rate (1980–1990)



Note: $r = 0.271$, $p = 0.006$.

Data sources: Klugman 2011; World Bank 2014. The economic growth rate here and elsewhere was calculated as the average annual growth rate of per capita GDP (counted in 2005 international purchasing power parity [PPP] dollars) for respective periods.

This correlation becomes substantially weaker for the 1990s, but it still remains significant (see Fig. 7).

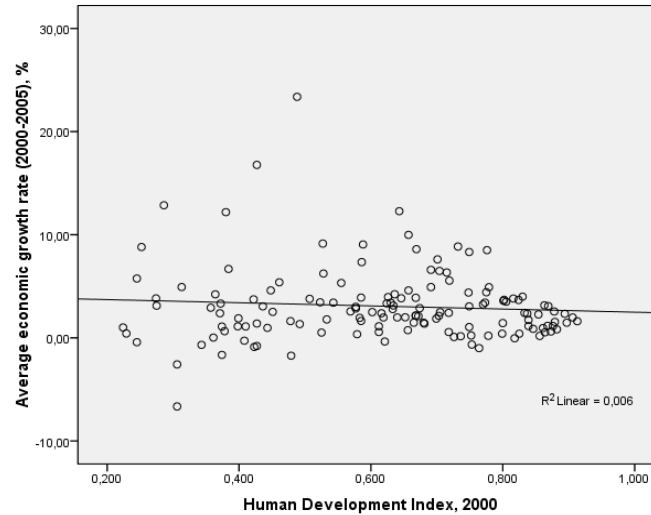
Fig. 7. Correlation between Human Development Index and Average Growth Rate (1990–2000)



Note: $r = .21$, $p = .021$ Data sources: Klugman 2011; World Bank 2014.

However, for the 2000–2005 period this correlation becomes negative (though insignificant) (see Fig. 8).

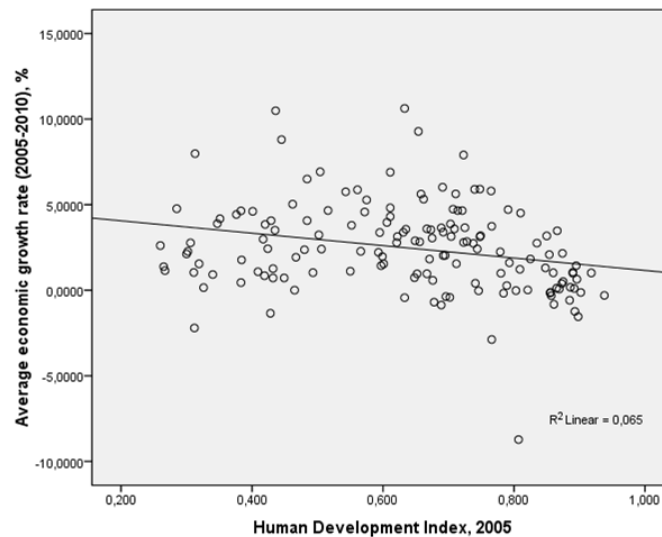
Fig. 8. Correlation between Human Development Index and Average Growth Rate (2000–2005)



Note: $r = -0.079$, $p = 0.349$. Data sources: Klugman 2011; World Bank 2014.

For the 2005–2010 period the correlation is not only negative, but also highly significant (see Fig. 9).

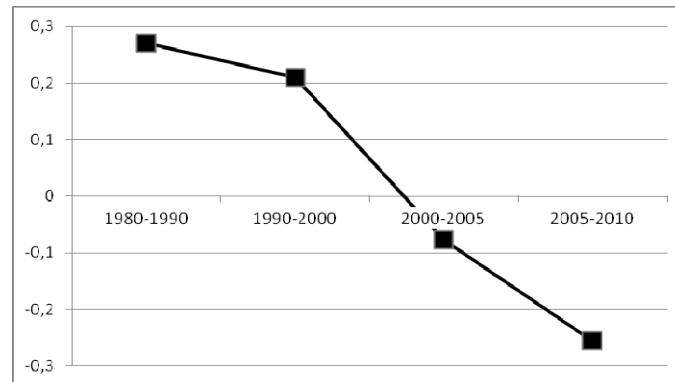
Fig. 9. Correlation between Human Development Index and Average Growth Rate (2005–2010)



Note: $r = -0.255$, $p = 0.002$. Data sources: Klugman 2011; World Bank 2014.

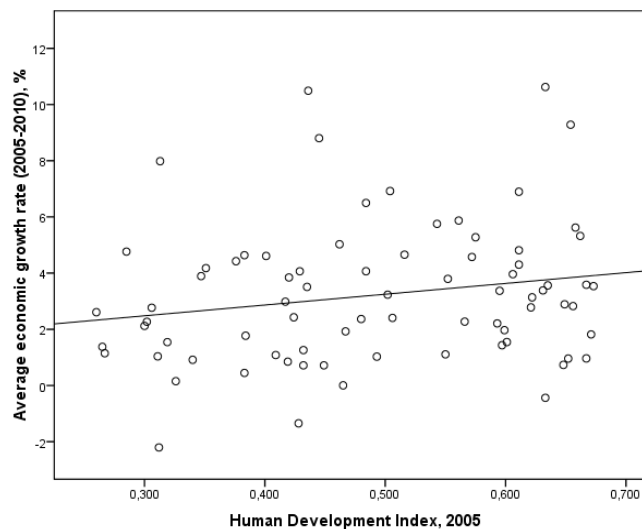
Thus, since 1980 (the first year for which UNDP presents HDI values according to its new computing system) we observe a rather pronounced downward trend in the correlations between the HDI and economic growth rates – indicated by the shift from a significant positive correlation in the 1980s to a significant negative correlation in the late 2000s (see Fig. 10).

Fig. 10. Dynamics of the correlation between the Human Development Index Values and Economic Growth Rates, 1980–2010



Note that the relationship between HDI and economic growth for 2005–2010 is actually curvilinear (see Fig. 14). In general, a problem with the above graphs is that they presume a uniform relationship between HDI and economic growth across countries regardless of HDI level. In fact, for 2005 we still observe a positive (albeit rather weak) relationship between HDI and economic growth for low- and middle-HDI countries in the 0.250–0.675 range (see Fig. 11).

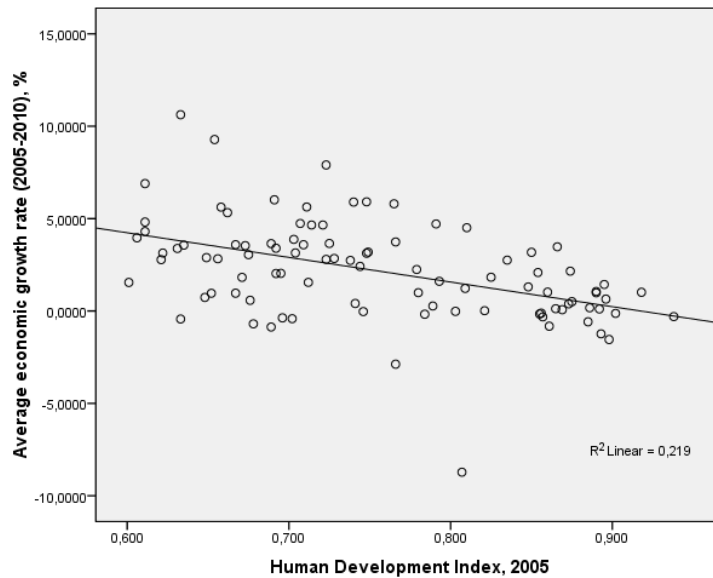
Fig. 11. Correlation between Human Development Index and Average Growth Rate in the 0.250–0.675 range (2005–2010)



Note: $r = 0.194$, $p = 0.045$ (1-tailed). Data sources: Klugman 2011; World Bank 2014.

On the other hand, for the right-hand part of the diagram (that is for middle and high-HDI countries in the 0.6–0.95 range) we observe a much higher and rather significant negative correlation (see Fig. 12).

Fig. 12. Correlation between Human Development Index and Average Growth Rate in the 0.60–0.95 range for 2005–2010

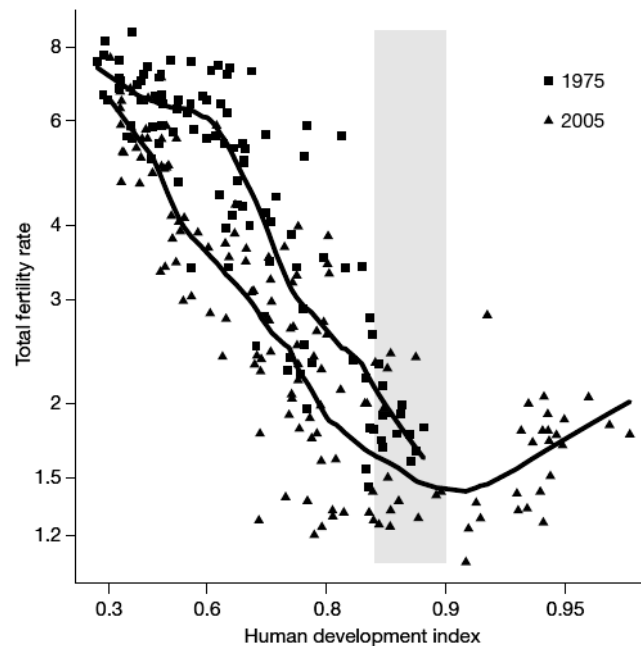


Note: $r = -0.468$, $p = 0.000001$. Data sources: Klugman 2011; World Bank 2014.

Note that the overall pattern turns out to be rather similar to the correlation between HDI and Total Fertility Rates (TFR) discovered by Myrskylä, Kohler and Billari (2009).

In August 2009, Mikko Myrskylä, Hans-Peter Kohler and Francesco C. Billari published in *Nature* their striking finding of a curvilinear relationship between fertility rates and the Human Development Index (HDI). Their findings demonstrated that for countries at the tail end (between 0.85 and 0.95) where countries with the highest HDI are clustered there was a reversal of the previously negative, development-fertility relationship. Instead, for these countries, their findings indicate that ‘further development’ can lead to increasing fertility rate (Myrskylä, Kohler, and Billari 2009: 741) (see Fig. 13).

Their findings might not be an isolated phenomenon as demonstrated by our investigations into the relationship between the Human Development Index and economic growth rates. Our findings show that the relationship between HDI and Economic growth rates changes depending on the level of HDI a nation has attained. Our research, supportive of Myrskylä *et al.*'s findings, demonstrates a more complex relationship between HDI and economic growth rates than previously thought and that socio-cultural factors independent of economic or human development should also be taken into account to construct a fuller model of rates of change in economic and human development.

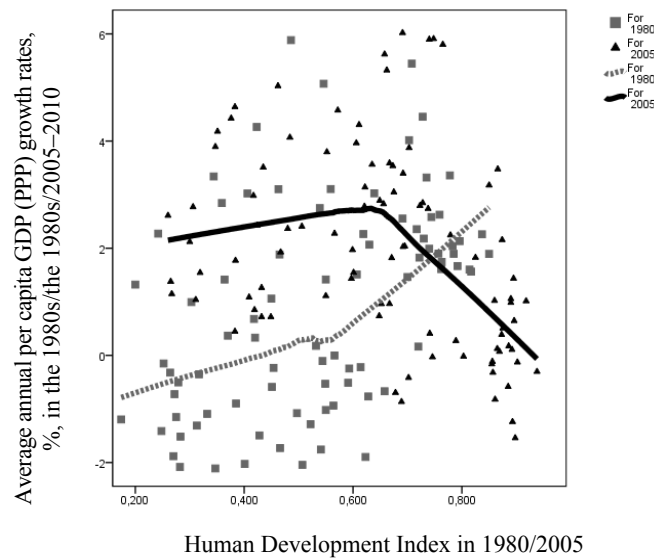
Fig. 13. Cross-sectional relationship between TFR and HDI in 1975 and 2005

Source: Myrskylä, Kohler, and Billari 2009: 741.

That is, prior to Myrskylä *et al.* we observe a linear relationship between HDI and a respective variable for the whole HDI range, and now we discover that there is, in fact, a curvilinear relationship whereby the old correlation persists among countries with low and low-middle HDI but not among countries with high-middle and high HDIs, which display a correlation directly opposite to the old one. There is, of course, a strikingly apparent reason for the recent finding of a curvilinear relationship between HDI and TFR as the ‘old’ (negative) relationship exists in the HDI range 0.3–0.9,² while the ‘new’ (positive) relationship is found in a totally new range (one in which no countries had reached in 1975). On the other hand, as regards the HDI – economic growth relationship, we find the ‘old’ (positive) relationship in HDI 0.15–0.6 ranges in both cases; however, with respect to the range beyond 0.6 Fig. 14 suggests that it is strongly negative for 2005–2010 and strongly positive for the 1980s.

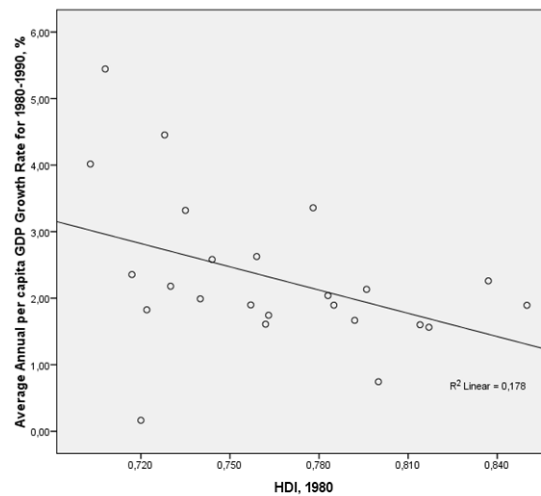
² In fact, Ranis and his colleagues (Ramirez, Ranis, and Stewart 1998: 3–8; Boozer *et al.* 2003; Ranis 2004; Ranis, Stewart, and Samman 2006) demonstrate that the positive influence of human development on economic growth, on the one hand, and the positive influence of economic growth on human development, on the other hand, tend to form positive feedback loops that could result both in virtuous (more human development – faster economic growth – acceleration of human development – even faster economic growth) and vicious (decline of human development – decrease of per capita incomes – further decline of human development – a continuing decrease in per capita incomes – an accelerated decline of human development) cycles.

Fig. 14. Comparing HDI values and annual per capita growth rates for the 1980s and 2005–2010, a scatterplot with fitted LOWESS lines



However, a closer inspection of the dataset reflected in Fig. 14 indicates that the negative correlation between HDI levels and economic growth rates among the countries with the top HDI scores (over 0.7) can be also detected for the 1980s (see Fig. 15).³

Fig. 15. Correlation between Human Development Index and Average Growth Rate in the > 0.70 range for the 1980s and HDI



Note: $r = -.422$, $p = .04$ (omitting an outlier [Argentina] that experienced a severe crisis in the 1980s due to some idiosyncratic causes).

Data sources: Klugman 2011; World Bank 2014.

³ Though the Locally Weighed Scatterplot Smoothing (LOWESS) technique employed in Fig. 14 was unable to capture this with those parameters that we used (Kernel: Epanechnikov; % of points to fit: 85).

However, the difference between the two cases still remains. In the case of the relationships between the HDI and TFR, the emergence of a correlation in a new direction is accounted for by the emergence of a considerable number of countries with HDI values > 0.9 by 2005. In the case of the relationship between the HDI and economic growth rates, the emergence of a salient negative correlation among the high-HDI countries is connected both with the growth of the number of countries with HDI scores⁴ higher than 0.7 and with the expansion of the negative correlation zone to the 0.6–0.7 range. As a result, with regards to the HDI – TFR relationship, in 2005, the general (world-wide) negative correlation became substantially weaker than it was in 1975 but it still remained negative. With respect to the second case the overall positive correlation of 1980–1990 turns into an overall negative correlation by 2005–2010.

It might not be quite clear, but the change of the correlation between the HDI values and economic growth rates is actually good news as the positive correlation implies the growth of inequality between countries with regards to their human development levels (*i.e.*, reflecting Ranis *et al.*'s vicious cycle) while the negative correlation implies a process of reducing inequality in HDI between countries.

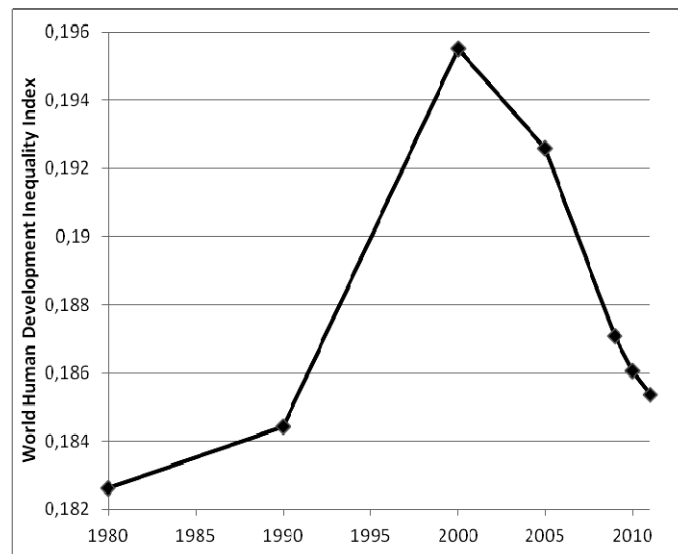
The previous research surveyed earlier demonstrates that economic growth has a strong positive effect on the HDI. This implies that in countries with higher HDIs, HDI will grow at a faster rate than in countries with lower HDI which will lead to increasing the gap in human development between highly developed and less developed countries, that would lead in turn to growing divergence in the rates of economic growth, and so on. Of course, the perfectly positive relationship between HDI and economic growth rate would imply actual increasing returns and a positive feedback between those variables ('virtuous cycle'). In fact, though such notions as 'increasing returns' and 'positive feedback' ('virtuous cycle') look intuitively very attractive, with respect to global development the respective phenomena actually imply just the growth of global inequality in human development, in general, and in per capita incomes, in particular. This was already noticed by Paul M. Romer (1986) who wrote that the model of increasing returns offered 'an alternative view of long-run prospects for growth' that was contrary to the assumptions of convergence theory: 'per capita output can grow without bound, possibly at a rate that is monotonically increasing over time. The rate of investment and the rate of return on capital may increase rather than decrease with increases in the capital stock. The level of per capita output in different countries need not converge; growth may be persistently slower in less developed countries and may even fail to take place at all' (Romer 1986: 1003). Thus, a consistently positive feedback loop of increasing return would imply divergence rather than convergence of countries with different incomes – and growing rather than diminishing global inequality. Note that this was just the case in the 1980s when Romer's article was written.

On the other hand, the negative correlation we found implies that countries with lower HDIs tend to have higher economic growth rates than high-HDI countries and (due to the remaining strong positive correlation between per capita incomes and HDI) their HDI would tend to grow faster than the high-HDI countries – hence, the level of HDI inequality should tend to decrease over time. Indeed, as we see in Fig. 16, the global HDI inequality levels (calculated as the value of standard deviation from the mean) have tended to increase when

⁴ We would like to remind the readers that we use HDI scores computed according to the new UNDP methodology introduced in 2010, whereas Myrskylä, Kohler and Billari used the old ones; whereas the same countries for the same years tend to have significantly lower HDI scores in comparison with the older ones.

the correlation in question was positive (that is, in 1980–2000) and tended to decrease when this correlation became negative (see Fig. 16).

Fig. 16. World Human Development Inequality Index, 1980–2010



Data source: calculated on the basis of data published in Klugman 2011.

Above we presented a theoretical framework for explaining the grounds for expecting a positive correlation between HDI scores and economic growth rates; indeed we have argued that this has been a running theme of most articles that relate HDI and economic growth. So why then do we recently observe negative correlations? What theory may account for the recent negative correlation (especially between 2005 and 2010) that we have demonstrated in this paper.

This new trend that we have described thus far can in part be accounted for by the phenomenon of convergence. The cornerstone for the theory of convergence was laid in an essay *Economic Backwardness in Historical Perspective* by Alexander Gerschenkron (1952), who developed the ‘theory of relative backwardness’ relying on data obtained from the history of European countries. The main tenet of his theory is as follows: ‘the opportunities inherent in industrialization may be said to vary directly with the backwardness of the country’ (Gerschenkron 1952: 6). Remarkably, Gerschenkron emphasized that the conditions inevitably required for a country to take advantage of its backwardness included ‘adequate endowments of usable resources’ and the absence of ‘great blocks to industrialization’ (*Ibid.*: 6). Thus, backward countries (provided that the outlined conditions are observed) were bound to grow faster than countries with developed economies, the former thus gradually converging with the latter. As Samuelson and Nordhaus put it,

poorer countries have important advantages that the first pioneers along the path of industrialization did not. Developing nations can now draw upon the capital, skills, and technology of more advanced countries. Gerschenkron suggests that *relative backwardness* itself may aid development. Countries can buy modern textile machinery, efficient pumps, miracle seeds, chemical fertilizers, and medical supplies. Because they can lean on the technologies of advanced countries, today's developing countries

can grow more rapidly... As low-income countries draw upon the more productive technologies of the leaders, we would expect to see *convergence* of countries toward the technological frontier. Convergence occurs when those countries or regions that have initially low incomes tend to grow more rapidly than ones with high incomes (Samuelson and Nordhaus 2005: 584).

The roots of the issue of unconditional convergence are also frequently traced to ‘A Contribution to the Theory of Economic Growth’ by Robert M. Solow (1956). This work is sometimes regarded as the pioneering one in laying the tenets for the hypothesis of unconditional convergence in the economic growth among the world countries (see, *e.g.*, Abel and Bernanke 2005: 235).

As Mankiw notes,

the diminishing returns to capital [implied by the Solow model] have another important implication: Other things being equal, it is easier for a country to grow fast if it starts out relatively poor. This effect of initial conditions on subsequent growth is sometimes called the catch-up effect. In poor countries, workers lack even the most rudimentary tools and, as a result, have low productivity. Small amounts of capital investment would substantially raise these workers' productivity. By contrast, workers in rich countries have large amounts of capital with which to work, and this partly explains their high productivity. Yet with the amount of capital per worker already so high, additional capital investment has a relatively small effect on productivity. Studies of international data on economic growth confirm this catch-up effect: Controlling for other variables such as the percentage of GDP devoted to investments, poor countries tend to grow at faster rates than rich countries (Mankiw 2008: 258).

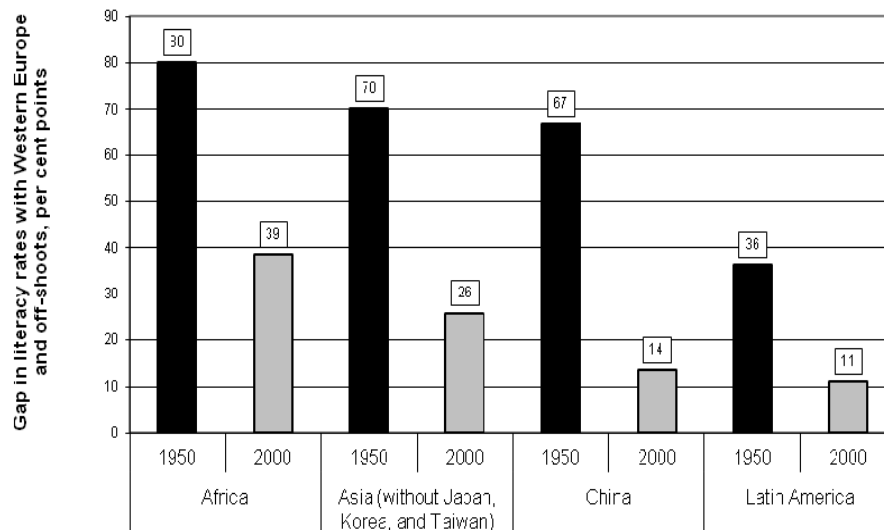
Abel and Bernanke note that according to the Solow model, if the economy is open, the absolute convergence gets support from some additional economic forces. Since poorer countries have less capital per worker and therefore a higher marginal product of capital than more affluent countries, investors from richer countries will be able to get greater profits by investing in poor countries. Therefore, foreign investment should provide a more rapid increase in capital stock in poor countries, even if the level of domestic savings in these countries is low (Abel and Bernanke 2005: 234).

It is easy to see that both the ‘Gershenkron’ factor and the ‘Solow’ factor for the faster growth of the peripheral (and especially semi-peripheral) economies are mutually complementary, as capital diffusion tends to be accompanied by technological diffusion (furthermore, capital diffusion is one of the main creators of channels for technological diffusion). On the other hand, Solow's model implies that output levels per capita should be higher the higher the savings rate in the country or the lower the population growth rate.

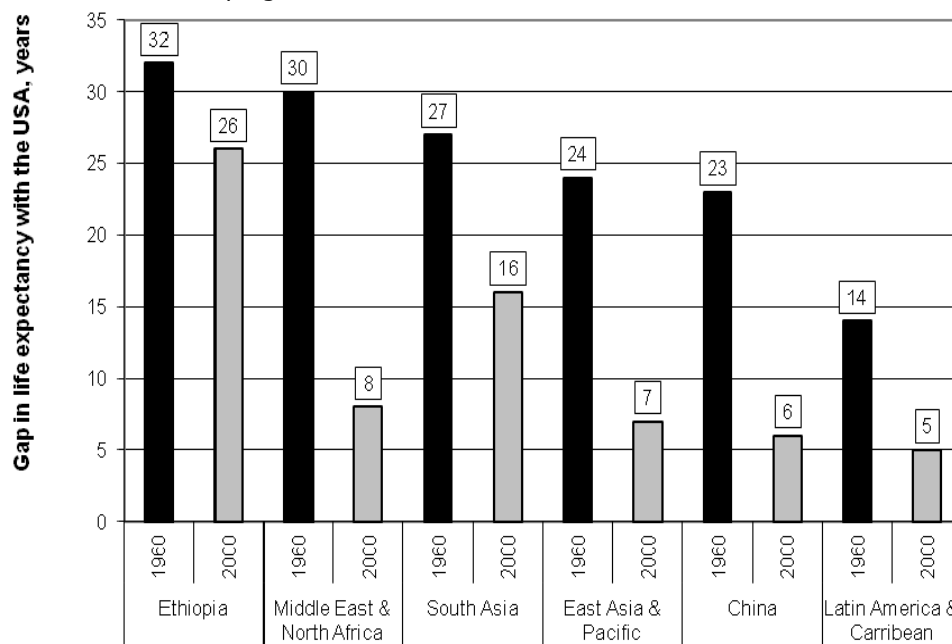
Of course, as low income countries tend to have lower HDI and (according to the convergence theory) higher economic growth, the mechanisms above would also produce convergence of HDI scores through the positive influence of the economic development on the HDI growth. Note that in the 1980s and 1990s the convergence theory became the subject of intensive critique as many authors pointed out, rightly, that the global post-World War II pattern was one of general divergence rather than convergence (Romer 1986; Barro 1991; Desdoigts 1994; Lee, Pesaran, and Smith 1997, *etc.*). Indeed, this was generally the case through the 1950–2000 period (*e.g.*, Malkov *et al.* 2010; Khaltourina and Korotayev 2010; Korotayev *et al.* 2010, 2011, 2012). The suggested failure of general (unconditional) convergence was attributed to different factors by various scholars, but

human development factors figured prominently in their arguments. Barro (1991: 437) concluded that ‘the relatively weak growth performances of countries in sub-Saharan Africa and Latin America’ and their failure to catch up with the developed countries (*i.e.* the absence of absolute convergence) could be attributed to the lack of human capital development. Indeed, Barro demonstrated that in his data set of 98 countries during the period between 1960–1985, the growth rate of real per capita GDP was positively related to initial human capital. Cohen (1996: 351) stated that ‘the poor countries have failed to catch up with rich ones because the progress that they have achieved in educating their workers (which is evidenced in the convergence of domestic inputs) is not sufficient to compensate for their poor endowment in the knowledge on which the education of workers stands’. This research suggested the presence of conditional rather than unconditional convergence, which implies convergence among countries with similar basic characteristics, with human capital figuring prominently among those characteristics (*e.g.*, Barro 1991; Mankiw, Romer, and Weil 1992; Cohen 1996). Note that by the 1980s we can already observe convergence among countries with high HDIs. Since that time, many more countries have moved to the $HDI > 0.7$ range. In general, with regards to human capital indicators, the gap between developing and developed decreased substantially between 1950 and 2000 (see Figs 17 and 18).

Fig. 17. The comparative decrease in the gap in literacy between Europe and developing areas of the world



Data source: Morrison and Murtin 2006.

Fig. 18. The comparative decrease in the gap in life expectancy between the USA and developing areas of the world

Data source: World Bank 2014.

Thus, the switch from the conditional to unconditional convergence pattern that we appear to be recently observing seems to be accounted for by the fact that by the late 1990s a very large number of countries began to satisfy (more or less) some major conditions of conditional convergence (see, *e.g.*, Korotayev *et al.* 2010, 2011, 2012; Korotayev and Khaltourina 2009; Malkov, Korotayev, and Bogevolnov 2010; Khaltourina and Korotayev 2010; Malkov *et al.* 2010).

This, however, does not appear to account for the above-described growth of the convergence zone. Thus, in the 1980s, countries with $0.6 < \text{HDI} < 0.7$ tended to grow slower than countries with an $\text{HDI} > 0.7$, whereas in recent years they grew faster (quite in accordance with convergence theory, but obviously there is still a high gap in human capital development level in comparison with advanced countries). One of the possible explanations can be connected to a sufficient degree of economic openness, which we noted is a condition of the conditional convergence model of economic growth (*e.g.*, Ben-David 1993: 653; Sachs *et al.* 1995: 199, *etc.*). Indeed, Sachs *et al.* (1995) noticed a clear convergence pattern in 1970–1995 for countries with open economies. They maintain that ‘the absence of overall convergence in the world economy during the past few decades [before 1995] might well result from the closed trading regimes of most of the poorer countries’ (Sachs *et al.* 1995: 37). They present evidence indicating that the lack of convergence observed across the world in 1970–1995 can be ‘explained by the trade regime: open economies tend to converge, but closed economies do not. The lack of convergence in recent decades results from the fact that the poorer countries have been closed to the world’

(Sachs *et al.* 1995: 3).⁵ Actually this finding seems to be quite congruent with classical convergence theories specified above. Indeed, according to those theories convergence is propelled by the movement of technologies and capitals from the more advanced higher-HDI countries to less advanced lower-HDI ones, where such a movement is much more likely among open economies. Note that by the early 21st century a very high number of developing and traditional economies had become much more open than before (among other things through the process that is usually denoted as globalization), which appears to be a major factor for the emergence of the general convergence pattern in the first decade of this century.

On the other hand, as Fig. 14 above (and Fig. 19 below) indicates, the highest economic growth rates in the recent decade tended to be observed in countries with middle levels of HDI. In low-HDI countries they were generally higher than in the high-HDI ones, but lower than in countries with middle HDI. This implies that the gap between middle-HDI countries (where most of the world population lives) and the high-HDI ones is decreasing (and this results in the overall convergence trend); but this gap is still growing between the middle- and low-HDI countries (and this makes the overall convergence trend much weaker than it would have been otherwise).

Note that those results are still rather congruent with recommendations produced by Ranis and his colleagues in their series of studies of the relationships between human development and economic growth (Ramirez, Ranis, and Stewart 1998: 3–8; Boozer *et al.* 2003; Ranis 2004):

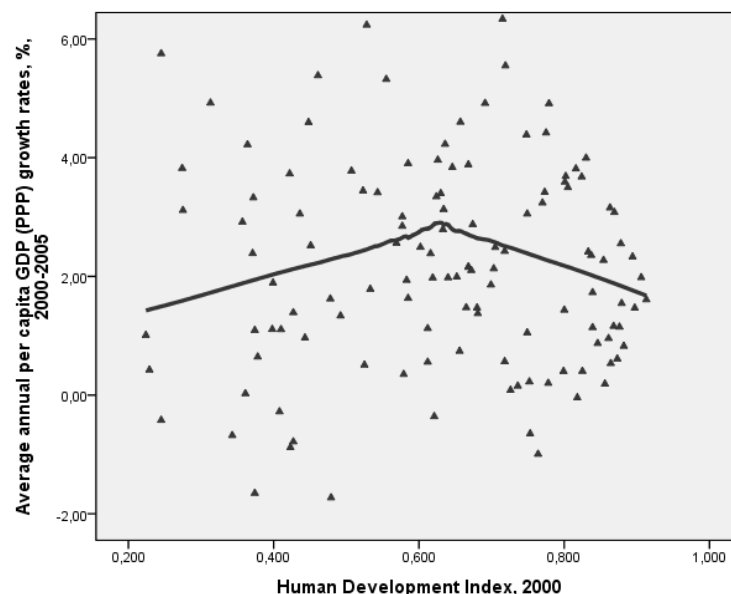
If human development improvements are indeed a precondition for sustainable economic growth, government policy and public funding may be necessary to move a nation above the human development threshold level. Nations stuck in vicious cycles, or low-human development poverty traps may need targeted government investments to meet the fixed costs of human development improvements that will lead to later economic growth. These fixed cost investments may include schools, hospitals, and the necessary governance improvements to effectively implement investment projects. The crucial lesson that emerges is that the old-fashioned view of ‘grow first and worry about human development later’ is not supported by the evidence. Improving levels of education and health should have priority or at least move together with efforts to directly enhance growth (Ranis 2004: 10).

Addenda: But Was Not It All Just Because of the Crisis?

One may, of course, argue that the positive correlation among middle- and high-HDI countries visible in Fig. 14 for 2005–2010 is entirely an artifact of the 2008–2009 crisis, and not a result of reversal of some deep inequality trends. Indeed, the advanced countries were struck by the crisis most painfully, whereas most developing countries fared much better during the crisis (see, *e.g.*, Grinin and Korotayev 2010). However, Fig. 19 below indicates that a pattern visible in Fig. 14 for 2005–2010 could hardly be accounted for by crisis only, as an essentially similar pattern is also found for 2000–2005.

⁵ Note that Sachs *et al.* quite remarkably state at this point: ‘This is now changing with the spread of trade liberalization programs, so that presumably the tendencies toward convergence will be markedly strengthened’ (Sachs *et al.* 1995: 3). As we see, this forecast has turned out to be quite correct.

Fig. 19. Correlation between the HDI value in 2000 and average annual per capita GDP growth rates in 2000–2005, a scatterplot with a fitted LOWESS line



This indicates that our analysis of convergence between high and mid-level HDI countries and a second pattern of divergence in the economic growth rates between mid-level HDI countries and low-level HDI countries is not a result of this economic crisis.

References

- Abel, A. B., and Bernanke, B. S. 2005. *Macroeconomics*. 5th ed. Boston, MA: Pearson/Addison Wesley.
- Afzal, M., Butt, A. R., and Ur Rehman, H. 2009. A Dynamic Analysis of the Relationship among Human Development, Exports and Human Development in Pakistan. *The Pakistan Development Review* 48(4): 885–920.
- Alderman, H., Behrman, J., Khan, S., Ross, D. and Sabot, R. 1996. The Returns to Endogenous Human Capital in Pakistan's Rural Wage Market. *Oxford Bulletin of Economics and Statistics* 58(1): 29–55.
- Barro, R. J. 1991. Economic Growth in a Cross Section of Countries. *The Quarterly Journal of Economics* 106(2): 407–443.
- Ben-David, D. 1993. Equalizing Exchange: Trade Liberalization and Income Convergence. *The Quarterly Journal of Economics* 108(3): 653–679.
- Boozer, M., Ranis, G., Stewart, F., and Suri, T. 2003. *Paths to Success: The Relationship between Human Development and Economic Growth*. Yale University Economic Growth Center Discussion Paper, 874. New Haven, CT: Yale University.
- Cohen, D. 1996. Tests of the 'Convergence Hypothesis': Some Further Results. *Journal of Economic Growth* 1(3): 351–361.
- Conceição, P., Mukherjee, S., and Nayyar, S. 2011. Impacts of the Economic Crisis on Human Development and the MDGs in Africa. *African Development Review* 23(4): 439–460.

- Cox, B. J., Arkoubi, Kh. Al, and Estrada, S. D. 2006.** National Human Resource Development. *Advances in Developing Human Resources* 8(1): 84–98.
- Dao, M. Q. 2011.** Changes in Human Development in Developing Countries: An Empirical Assessment. *Perspectives on Global Development and Technology* 10: 288–299.
- Dash, R. K., and Sahoo, P. 2010.** Economic Growth in India: The Role of Physical and Social Infrastructure. *Journal of Economic Policy Reform* 13(4): 373–385.
- Desdoigts, A. 1994.** *Changes in the World Income Distributions: A Non-parametric Approach to Challenge the Neo-classical Convergence Argument*. Berlin: Humboldt Universitaet Berlin.
- Gerschenkron, A. 1952.** Economic Backwardness in Historical Perspective. In Hoselitz, B. F. (ed.), *The Progress of Underdeveloped Areas*. Chicago, IL: University of Chicago Press.
- Grinin, L. E., and Korotayev, A. V. 2010.** Will the Global Crisis Lead to Global Transformations. 1. The Global Financial System: Pros and Cons. *Journal of Globalization Studies* 1(1): 70–89.
- Khaltourina, D. A., and Korotayev, A. V. 2010.** System Monitoring of Global and Regional Development. In Khaltourina, D. A., and Korotayev, A. V. (eds.), *System Monitoring: Global and Regional Development* (pp. 11–188). Moscow: Librokom/URSS. In Russian.
- Klugman, J. 2011. (Ed.)** *Sustainability and Equity: A Better Future for All. Human Development Report 2011*. Houndmills – New York: Palgrave Macmillan.
- Korotayev, A. V. 2009.** Compact Mathematical Models of the World System Development and Their Applicability to the Development of Local Solutions in Third World Countries. In Sheffield, J. (ed.), *Systemic Development: Local Solutions in a Global Environment* (pp. 103–116). Litchfield Park, AZ: ISCE Publishing.
- Korotayev, A. V., and Khaltourina, D. A. 2009.** *Modern Trends of Global Development*. Moscow: Librokom/URSS. In Russian.
- Korotayev, A. V., Khaltourina, D. A., Malkov, A. S., Bogevolnov, J. V., Kobzeva, S. V., and Zinkina, J. V. 2010.** *Mathematical Modeling and Forecasting of World and Regional Development*. 3rd ed. Moscow: LKI/URSS. In Russian.
- Korotayev, A., Malkov, A., and Khaltourina, D. 2006.** *Introduction to Social Macrodynamics: Compact Macromodels of the World System Growth*. Moscow: KomKniga/URSS.
- Korotayev, A., Zinkina, J., Bogevolnov, J., and Malkov, A. 2011.** Global Unconditional Convergence among Larger Economies after 1998? *Journal of Globalization Studies* 2(2): 25–62.
- Korotayev, A., Zinkina, J., Bogevolnov, J., and Malkov, A. 2012.** Unconditional Convergence among Larger Economies after 1998? In Grinin, L., Ilyin, I., and Korotayev, A. (eds.), *Globalistics and Globalization Studies* (pp. 246–280). Moscow – Volgograd: Moscow University – Uchitel.
- Lee, K., Pesaran, M., and Smith, R. 1997.** Growth and Convergence in a Multi-Country Empirical Stochastic Solow Model. *Journal of Applied Econometrics* 12(4): 357–392.
- Malkov, A. S., Bogevolnov, J. V., Khaltourina, D. A., and Korotayev, A. V. 2010.** A System Analysis of the World Dynamics: Interaction of the World System Core and Periphery. In Akaev, A. A., Korotayev, A. V., and Malinetsky, G. G. (eds.), *Forecasting and Modeling Crises and World Dynamics* (pp. 234–248). Moscow: LKI/URSS. In Russian.
- Malkov, A. S., Korotayev, A. V., and Bogevolnov, J. V. 2010.** Mathematical Modeling of the Interaction of the World System Core and Periphery. In Akaev, A. A., Korotayev, A. V., and

- Malinetsky, G. G. (eds.), *Forecasting and Modeling Crises and World Dynamics* (pp. 277–286). Moscow: LKI/URSS. In Russian.
- Mankiw, N. G. 2008.** *Principles of Macroeconomics*. 5th ed. Boston, MA: South-Western College Publishing.
- Mankiw, N. G., Romer, D., and Weil, D. N. 1992.** A Contribution to the Empirics of Economic Growth. *The Quarterly Journal of Economics* 107(2): 407–437.
- Moore, W. 2006.** A Graduate in Every Household: The Potential Impact of a Rise in the Number of University Graduates on Output in Barbados. *Journal of Eastern Caribbean Studies* 31(3): 27–38.
- Morrison, Ch., and Murtin, F. 2006.** *The World Distribution of Human Capital, Life Expectancy and Income: A Multi-Dimensional Approach*. Paris: OECD.
- Myrskylä, M., Kohler, H.-P., and Billari, F. C. 2009.** Advances in Development Reverse Fertility Declines. *Nature* 460: 741–743.
- Özcan, B., and Bjørnskov, Ch. 2011.** Social Trust and Human Development. *Socio-Economic Planning Sciences* 40: 753–762.
- Poveda, A. C. 2011.** Economic Development and Growth in Colombia: An Empirical Analysis with Super-Efficiency DEA and Panel Data Models. *Socio-Economic Planning Sciences* 45: 154–164.
- Ramirez, A., Ranis, G., and Stewart, F. 1998.** *Economic Growth and Human Development*. Queen Elizabeth House Working Paper, 18. Oxford: Oxford University.
- Ranis, G. 2004.** *Human Development and Economic Growth*. Yale University Economic Growth Center Discussion Paper, 887. New Haven, CT: Yale University.
- Ranis, G., Stewart, F., and Samman, E. 2006.** Human Development: Beyond the Human Development Index. *Journal of Human Development* 7(2): 323–358.
- Romer, P. M. 1986.** Increasing Returns and Long-Run Growth. *The Journal of Political Economy* 94(5): 1002–1037.
- Sachs, J. D., Warner, A., Aslund, A., and Fischer, S. 1995.** Economic Reform and the Process of Global Integration. *Brookings Papers on Economic Activity* 1(25): 1–118.
- Samuelson, P. A., and Nordhaus, W. D. 2005.** *Economics*. 18th ed. Boston, MA: McGraw-Hill.
- Sen, A. 1985.** Well-Being, Agency and Freedom. *The Journal of Philosophy* 82(4): 169–221.
- Sen, A. 2000.** A Decade of Human Development. *Journal of Human Development* 1(1): 17–23.
- Solow, R. A. 1956.** A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics* 70: 65–94.
- Streeten, P. 1994.** Human Development: Means and Ends. *The American Economic Review* 84(2): 232–237.
- Tridico, P. 2007.** Institutions, Human Development and Economic Growth in Transition Economies. *The European Journal of Development Research* 19(4): 569–593.
- World Bank 2014.** *World Development Indicators Online*. Washington, D.C.: World Bank. URL: <http://web.worldbank.org/>.

The Tiger and the Dragon (Development Models and Perspectives of India and China)*

Leonid E. Grinin

In the coming decades in the process of globalization the position of the USA and Europe will weaken, while the role of developing countries will increase. The role of the two largest emerging economies – China and India – will be of special significance. What future will these fast-growing giants face? The demographers agree that pretty soon India will lead the world in population and thus surpass China, while China will encounter serious population ageing. But economic and political scenarios of the future are quite different: from resounding success and world leadership to collapse caused by demographic and socio-political troubles. Which of them is more feasible? In the present article I analyze the Chinese and Indian development models separately and comparatively and make prognosis of their perspectives in the twenty-first century. Such an analysis could be helpful for understanding Russia's ways of development.

Keywords: *China, India, globalization, the Third World, East Asian model, Chinese model, Indian model, emerging economies, struggle against poverty, authoritarianism, democracy, centre, periphery.*

Introduction: Globalization Closes the Developmental Gap between the States

It is obvious that in the next decades the global political landscape will undergo dramatic changes. The role of the USA and Europe will diminish while that of the developing countries (especially of the large ones) will increase. Numerous reasons determining this process have been defined (see, e.g., Frank 1997; Arrighi 1994, 2007; Todd 2003; Buchanan 2002; Mandelbaum 2005; The USA National Intelligence Council 2009; NIC 2012; Korotayev *et al.* 2011). They have been analyzed in other works of mine (Grinin 2009b, 2011, 2012a, 2012c; Grinin and Korotayev 2010; 2011). In any case the diversity of opinions cannot suppress the fact that it is globalization that makes this tendency inevitable. Having originated in the world with a deep developmental gap between rich and poor countries, later it contributed to closing this gap. I think that globalization itself presupposes that developing countries should advance faster than the developed ones (for more details see Grinin 2013), because it strengthens economic openness which, in turn, brings into effect a kind of 'law of communicating vessels'. As a result, the development of the periphery has accelerated, and that of the core has slowed down.¹ No doubt, this is one of the most significant results in the

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¹ Thus, developing countries generally benefit globalization despite all the statements about the growing disparity

past two decades. The gap will keep on narrowing (of course, to a certain extent) in the next decades. It will involve economic expansion, as well as poverty reduction and rapid growth of the middle class in the developing countries (see, *e.g.*, NIC 2012).

In the 1960s and the 1970s, many economists had no illusions that in the near future the Eastern and South countries would overcome backwardness and depression. They fairly considered those peoples' unwillingness to have a better life as the main obstacle. Poverty did not oppress them; they did not consider it as an unbearable state (see, *e.g.*, the book by the Nobelist Myrdal [1968]; one can find a similar view in Braudel 1981–1984). Such a mentality is still typical for peoples in the underdeveloped regions, especially in Tropical Africa.

But in many developing countries the situation has changed, and now the inert Third World is turning vibrant. One of the main transformations seems to be the change of life priorities of hundreds million of people who increasingly aspire to break out of poverty and illiteracy to a different life.

Thus, to waken population of poor countries to activity (that demands great efforts for initial modernization and education) appears to be the major obstacle to a breakthrough. When the desire for better living conditions eventually appears in the undeveloped countries, there starts to work a sort of 'engine'. It may lead to a qualitative result (though such a 'Brownian motion' always entails all kinds of iniquities, abnormalities, nonsense, and injustice, *etc.*). Once started, the movement for the better will generate social energy for many decades. Furthermore, if people's and authorities' efforts are consolidated, the emerging synergy may bring a resounding success. That was the case in China, India and a number of other developing countries. In wealthy societies with all their advantages in culture, education and qualification, this resource of development ran short long ago. With the account of population ageing, opportunities for rapid development are seeping away. This state of affairs defines the system of globalization 'communicating vessels'. In order to reduce production costs, the developed countries move their capital and production capacities to the developing ones where millions of young people seek for jobs. The engine of the world economic growth, consequently, moves from the core to the periphery. Thus, the role of developing countries in the world economy (especially in its surplus production) grows.

At present, the role of the two largest economies – China and India – is especially significant, and their impact will continue to grow in coming decades. It is not surprising, as in 2030 these two countries will account for one third of the world population and, perhaps, 35 per cent of world energy consumption (see, *e.g.*, BP 2012: 45). In the present article I analyze the Chinese and Indian development models separately and comparatively. Such analysis allows detecting some commonalities of all the fast growing countries whose joint influence in 2030 will be great as well.

1. The Chinese Model. Three Drivers: Investments, Export, and Competition between Provinces

1.1. The Chinese Model: General and Specific Features. Growth Factors²

The East Asian model of economic development. Many analysts suppose that China generally follows the East Asian development path (see, *e.g.*, Selischev A. S. and Selischev N.

between developing and developed states. We should note that Jagdish Bhagwati appears to be right when advocating globalization against its critics (Bhagwati 2004).

² For the detailed analysis of the Chinese development model see Grinin 2011; Grinin, Korotayev, and Tsirel 2014.

A. 2004: 166–175; Popov 2002; Anderson 2008). This model originated in post-war Japan and then it was implemented in the so-called ‘Asian Tigers’ – South Korea, Taiwan, Singapore and Hong Kong. Later it spread to South East Asia and to the Pacific Basin.

Despite various peculiarities, the following features of the model are inherent in each country and fully realized in China as well: a) export-oriented economy, especially industry; b) cheap labor force; c) mobilization of foreign investments and creation of favorable business environment, as well as an active import of technology; d) high investment rates (accounting for 30 to 40 per cent of GDP and even more); e) an active participation of a more or less authoritarian state in economic development; f) creation of special economic zones (in China and some other countries).

This model generally provides a high economic growth rate over a long period, while the involvement of capital and technologies allows raising technological level and labor productivity. However, some analysts assume that after per capita GDP in the country reaches \$10,000, China's development rate will slow down as it was the case in Japan and other countries (see Eichengreen 2011; Anderson 2008).

Specific features of the Chinese model. In comparison with other countries following the East Asian pattern, China has unique (and at the same time fundamental) features of the development model such as enormous population and the greatest (if compared with other countries) role of the state governed by the Communist Party. In China, it is just the great role of the state that provides an extra high savings rate in GDP (see Diagram 1) and makes it possible to invest huge capital and maintain high growth rates.

The Chinese overseas capital, accumulated mainly in states and administrative districts with the ethnic Chinese populations (Hong Kong, Macao, Taiwan and most of Singapore) also plays an important role. This capital is the source of the vast majority of FDI.

Factors and sources of China's growth (at present their potential is depleting, so these factors can also be considered as potential weaknesses).

- A huge pool of cheap labor and the so-called demographic dividend (connected with reducing birth rate and ‘young’ structure of population). The policy of birth control also reduces expenditures on the growing generation;
- low-cost social policies introduced when there was a young age structure (an opportunity for the state to disregard its obligation with respect to pensions and benefits for a huge part of the population; paid education and medical service for the population; low level of safety at work, *etc.*);
- plentiful supplies of some mineral resources (coal, iron, oil, rare metals, *etc.*);
- ‘cheap ecology’ (lack of proper care for environmental protection);
- low exchange rate of yuan, favoring export.

The driving forces of the Chinese development. *In China a unique system of forces driving development has emerged in which, unlike in developed countries, it is not domestic private capital but foreign business, local authorities of different levels of administrative division and national corporations that play the major role.*

The role of foreign investors in the Chinese economy is extremely significant, and in this very sector, dealing with foreign capital, a major part of export and innovative goods are produced. China has become the world workshop for the processing of raw materials and for the assembly of finished products. This means that local and foreign manufacturers import into China enormous amounts of raw materials, accessory parts, intermediate goods, *etc.* and, after processing or assembling, the finished or semi-finished products are

exported. This specialization explains the fabulous figures of the Chinese export and import reaching 4 trillion dollars. There are only few large corporations in the world that are not represented in China. Foreign capital activity is essential to understanding the sources of China's miracle.

As regards a pure Chinese constituent of the miracle, one should point out the special and extremely effective mechanism of state participation for achieving such a high economic growth rate in production development – that is, a strong competition for investments and high annual growth rates at all provincial and local levels (see, e.g., Berger 2006, 2009). According to the estimates of economist John Lee, domestic investments make up 40 per cent of China's growth, while export sector and foreign direct investments contribute approximately 30 per cent (see Berthelsen 2011). In my opinion, the successful stimulation of the administrative machinery's interest in economic growth is the key explanation of Chinese development phenomenon. Another powerful source of growth comprises large-scale (including monopolistic) national corporations, tending to invest their benefit in new projects.

Limitations and drawbacks of the Chinese model. In spite of the fact that its technology and innovative level is increasing, the *Chinese economy remains generally extensive*, based on extremely huge resources and capitals involved. At the same time *it still remains: a) too resource-intensive; b) too energy-intensive; c) extremely polluting; and d) too export-oriented*. Despite a proliferation of patents (see, e.g., The World Bank... 2012: 177; Boeing and Sandner 2011: 17; WIPO 2012; Nasibov 2012) the economy generally remains non-innovative.

The Chinese leaders are quite aware of the drawbacks of the existing developmental model. They continue to set the objectives of its transformation and make some efforts in this direction. Nevertheless, despite a certain progress the results fall short.

1.2. Growth Limits

Within the current model of development the constraints on China's extreme economic growth have clearly shown up.

1. Scarcity of energy resources and raw materials sharply manifests as China is unable to supply itself with energy and raw materials any more and depends heavily on import. At the same time, the increasing import of fuel, mineral and other resources drives the world prices which raise the cost of Chinese export products. Within the current unprofitable export-led model the reliance on energy and resources consumption will only increase.

2. The coming labor shortage and its increasing cost. Despite high unemployment rates one can also observe labor shortages. After 2013–2016, labor shortage is supposed to gradually increase, while work-force size – to decrease by 2 million people a year (see, e.g., NIC 2012: 15). Due to the existing unemployment and number of rural migrants, the labor shortage will not be sharply perceived at once, but even now in some provinces it leads to a continuing rise in wages. With a limited labor force and wage-push, it will be very difficult to maintain rapid growth.

3. An inevitable appreciation of export production and risk of capital inflow reduction. The severe restrictions like the costs of energy, raw materials, labor, and other expenditures, a probable revaluation of the yuan and rivalry of the states with cheaper labor force will be an obstacle for sustaining export growth. But once growth decelerates, the investment flow will also decrease, as it is mainly joint ventures with foreign capital participation that are engaged in export. In 2012, one could observe the export growth deceleration and reduction of foreign investments. Foreign direct investment (FDI) in China

declined by 3.7 per cent. Moreover, FDI in the production sector fell by 6 per cent (see Mereminskaya 2013). The cause is in the growth of labor cost, protests against environmental pollution and, perhaps, anti-Japanese sentiments, forcing Japanese companies to move out to other countries. This tendency continues in the beginning of 2013.

4. The decline of return on investment. Today the investment rate in China approaches and even exceeds 50 per cent of GDP (see Diagram 1). This provides a huge share of growth. Since the early 2000s, the investment return has sharply declined and, despite all efforts, remains generally low. At the same time the burden of maintaining unprofitable facilities and the value of potentially unrecoverable debts is increasing. China has an enormous number of excessive facilities in almost all sectors of its economy. The government quite often forces closures of excessive facilities; nonetheless, their number keeps growing. This results both in wasted expenditures and in excessive competition which reduce profit. Of course, this cannot go on endlessly, and sooner or later the investments will decrease, accompanied by a lower growth rate.

5. Environment. China takes the lead in the whole world with respect to water, air and soil pollution, acid rains, and the number of sick people suffering from pollution effects (see Zitan 2013). The 12-year plan proposes considerable efforts for a better environment, but the solution to these problems requires huge funding over a long period which will raise the production and export values and affect the growth rate.

6. The increasing social expenditures. The population ageing, rising living standards, necessity to maintain social peace and to prevent the development of an extreme gap in living standards and an abnormally high Gini coefficient (see Yu 2013), as well as concern for an increase of domestic consumption will lead to the growth of the state's responsibilities. Every year China will have to spend more on social needs; that has already had a certain impact, and in medium- and especially in long-term perspectives it will become a heavy burden.

7. Growing disproportions and the necessity to restrain the growing inequality and to control inflation have a severe impact on economic policy and growth rates because they constantly threaten the stability of the Chinese society. A too wide income gap contradicts the very idea of 'building a harmonious society'. Permanent changes of monetary policy in connection with inflation risks also lead to business loss.

The inevitability of the growth slowdown. It is difficult to change the existing growth model due to influential forces interested in its maintenance, namely, different authoritative levels and large-scale state corporations. For decades they have made great progress in production expansion as well as in manipulating statistic figures. Moreover, the Chinese bureaucratic and social system is actually unprepared to switch to a new development model. For example, there is the only instrument to avoid overinvestment that every year creates additional excessive capacities in China – the restrictive directives. But this means to tie the provinces' hands, and, in fact, to stop the major engine for growth.

Taking into account the above-mentioned limitations, one can suppose that despite all the Chinese authorities' efforts, the growth rates will gradually decelerate. Even under favorable conditions *within the next three years the growth rate will not exceed six-seven per cent*. And after 2016, it will fall to four-six per cent. Although, objectively speaking, such a deceleration can be considered positive for China, the Chinese government has a very different view.³

³ In my opinion, the development model cannot be changed if at the same time to pursuit the extreme growth rates at any cost. To change the pattern, one should slow down in order not to swerve. If unchanged, the model raises a possibility for

2. The Indian Model: A Synthesis of Three Worlds

2.1. The General Description of the Model

The Indian model substantially differs both from the East Asian pattern in general and from the Chinese one in particular. It bears no resemblance to any other model; this is a peculiar type of development model. India has a unique social and cultural setting. All its aspects are specific, starting from the fact that the subcontinent lies on a separate tectonic plate. For example, India's attitude with respect to cultural globalization differs in essential ways from that of China's. China's government attempts to control diverse global influences, especially the cultural ones (Yan Yunxiang [2002] gives an adequate definition for this phenomenon – 'the controllable globalization'). India is much more open. This country itself is an exporter of a number of different cultural patterns, which have become the heritage of the world, for example, yoga, meditation, Tantrism, *etc.* (for details see Srinivas 2002; Mondal 2012).

A unified and controversial transitional society. India is a world with a population surpassing that of some continents. In political terms it is founded on the principles of modern national federal state, and at the same time represents a model of a multicultural world where diverse religions, ethnic groups, classes and castes coexist. With respect to cultural, linguistic and religious diversity, India trails only Africa. For almost seven decades, India has been actively transforming from an agrarian, patriarchal and almost illiterate society to an urban, industrial and information-oriented one. Today India is actually an integration of several types of social systems. That said, the old agrarian system, adherent to caste ranking and community structure, on the one hand, provides the modern system with a steady social energy resource in the form of an abundant labor force. On the other hand, the traditional system becomes a source of major problems, as Indians themselves now consider poverty, illiteracy and lack of qualification incompatible with modern standards.

In short, we observe a great transitional economy with distinct contrasts. In particular, a high educational level and a large share of high-skilled specialists coexist with hundred millions of illiterate people; a large middle class (which is not characteristic of all emerging economies) – with mass poverty. Perhaps, one fifth of the population already lives close to the European standards, but a huge part of India's population lives below the poverty line (this line is set too low at that). Of course, there are strong regional imbalances. A true (not imitation) and established democracy – quite a rare case for the Third World countries – goes together with high (for similar states) corruption and inequality. The European-style democracy and the middle class, consisting mainly of graduates, go hand in hand with specific Indian prejudices, including those connected with caste system. At the same time, it is the caste traditions that serve as an important damper to suppress discontent with social inequality. The caste system preaches that inequality is a natural state and people belonging to different castes should live in different ways. That is why an ultimate decay of caste's ideology and psychology can lead to increasing social tensions (see, *e.g.*, Khoros 2009: 93). Today the number of people belonging to the lowest castes and tribes is much more than 250 million (Yurlov 2007: 9). The share of the poor among them is especially large.

a deep crisis in the future. That is why the growth rates deceleration, though causing problems and social discontent, is a better alternative to a structural crisis.

All these and other issues (which are discussed later on) represent the current challenges as well as threats to India's future. Nevertheless, one can hope that the country will cope with them so that they would not be the source of irreparable perturbations.

2.2. Three Worlds Combined in a Single Model

Contrasts are typical for all fast emerging countries with a transition economy. But India has its own distinct feature. I would rather call it 'a combination of three worlds'. The matter is that India's model is a peculiar and still a harmonic mixture of important features of the developed capitalist, socialist and developing countries, that is of all three worlds (the First, the Second and the Third one) of the modern world map.⁴ In my opinion, no other country has such a unique combination, which in many respects determines the peculiarity of the Indian development model. Let us consider it in detail.

It is clear that *the Third World* is associated with poverty and population pressure that drives young people to leave villages for cities. The share of peasants in India's demographic structure is still dominant, the shortage of land and gradual growth of labor productivity in farming generate rural overpopulation, poverty and high unemployment rates. One should also mention widespread adult illiteracy especially among females⁵ (see Table 1). The Indian ethnic and civilizational peculiarity, including a modern version of community self-government in villages (officially these self-governing bodies are called 'panchayats') and vivid remnants of the caste system, is also important.

The Second World manifests in an active state policy in the sphere of infrastructure and economic development on the basis of five-year plans. The state regulates economic activity and social life. It results, for instance, in supporting small business through regulation, licensing and setting quotas, in the protection of workers' rights by special laws, in attempts to provide the peasants with minimal means of subsistence (*e.g.*, through their involvement in paid public works, including land reclamation), quotas for women and members of lower castes in representative self-government bodies and so on. Here one should also mention the vigorous struggle against poverty and illiteracy, as well as efforts in demographic regulation.

The First World. The positive features of the First World (which imply democratic traditions and high level of development) are uncommon for developing countries. Meanwhile, India is considered a well-established democracy; it has a mature institution of private property and other important institutions of non-state economy such as large private corporations and financial market. The social stratum of self-employed people and high-skilled specialists engaged in private business has also been formed. Some of these features were introduced already in the colonial period. At present other peculiarities supplement them, including achievements in the field of innovations and fundamental science. India has the third largest scientific and technical labor force in the world. About 200 of the Fortune 500 companies use Indian software services (O'Neill and Poddar 2008; Planning Commission 2008, Vol. 3: 251). Alongside with China, India has its own space program.⁶

⁴ The Second (that is the socialist) World, though having reduced its representation, still persists in some Asian countries and (in some spheres) in the CIS countries and also in Europe. It is worth noting that, according to the constitution, India is officially named a *socialist* secular democratic republic.

⁵ The law on universal primary education for children has already been passed. But there are many problems here.

⁶ It is important to mention that according to the government (Planning Commission 2008, Vol. 3: 251), the unprecedented progress in IT-technology was achieved through the realization of the Government Resolution on software technology parks which was adopted in 1993 (Software Technology Parks) (*Ibid.*: 255–256).

There is no such a singular combination of three worlds in any other developing country. China combines only two worlds: the Third and the Second one. The features of the First world are only emerging on the basis of the Western technology. In Asia, even in the former provinces of British India (such as Pakistan and Bangladesh), democracy can hardly take roots. We can speak about a kind of combination of three worlds in some Latin American countries (especially in Argentine, Chile or Mexico), with the qualification that the institution of private property was formed there long ago. As for Mexico, its development is a result of its active relations with the USA. But the level of democracy there is much lower than in India, and the number of high-tech specialists is quite limited.

In my opinion, the synthesis of the three worlds gives advantages to India in terms of adjustment to different phenomena (see below).

For the purposes of this article it is very important to view all achievements, advantages and problems through the lens of an Indian harmonic combination of the three worlds. Firstly, the features of the First World manifest in India's economic structure with its prevailing services sector (including high-tech services) as is the case in developed economies.⁷ Secondly, they are evident in its export structure where the high-tech services also predominate.

The features of the Second World result among regulations and other things in government's plans of economic transformation, in particular, in the development of innovative industries, agricultural productivity growth, infrastructure and medicine development (see Planning Commission 2011). The features of the Third World constantly show up while in the field of demographic resources they will even sharpen.

Table 1. Adult literacy rate (% of people ages 15 and above)

	Both sexes	
	2000	2010
China	90.9	94.3
India	61.0 (2001)	62.8 (2006)
	Female	
	2000	2010
China	86.5	91.3
India	47.8 (2001)	50.8 (2006)
	Male	
	2000	2010
China	95.1	97.1
India	73.4 (2001)	75.2 (2006)

Source: ADB 2012.

⁷ In the GDP structure services account for 59 per cent, industry – 27 per cent, agriculture – 14 per cent. At the same time, the industry's share remains the same for 30 years, while the services sector considerably increased at the expense of agriculture declining share.

2.3. Characteristics, Peculiarities, and Advantages

The main features and purposes of state economic policy. The role of the state in India's economic growth is significant (but the state intervenes in quite a different way than it does in China), so it makes sense to consider some of its aspects. The Indian state initially aimed at creating a powerful economy and pursuing social policy. That is why most objectives as well as the means for their achievement (governmental planning and investments, control and regulations) remain consistent. However, in the course of time, especially after the 1991 reforms, the attitude to foreign investments drastically changed. In addition, the problem of growth acceleration was solved and a breakthrough in India's export potential was achieved. As a result, according to the WTO data, India's openness ratio is about 30 per cent (see Ministry of Economic Development of the Russian Federation 2012), it is several times larger than it was in the 1970s. And the contribution of foreign trade to India's total GDP is growing. It has considerably come close to the share of international trade in the Chinese GDP (see Syed and Walsh 2012). However, India's dependence on the world economy is also increasing.

The state's main economic objectives and the means for their achievement are as follows:

1. Achievement of high economic growth rates (up to 8–10 % per year) by means of: a) federal and regional planning and government investments; b) infrastructure improvement; c) attraction of FDI; d) development of high technologies; e) development of the education sector; f) import substitution and creation of necessary economic sectors; g) export promotion; h) other measures.

2. Support for small business and the peasantry through restrictions on large-scale business and foreign capital, different privileges, organization of public works, *etc.* In addition, in India such support combines with recognition of corporate giants' special role and necessity to attract foreign investments. Thus, for instance, large foreign retailers cannot expand today, because there are fears that they will drive out small traders. But they are likely to enter the Indian market under certain conditions.

3. Fight against poverty and illiteracy.

The general description of the model. The modern Indian development strategy has many features similar to those of other more or less successful emerging economies. At the same time there are some indigenous features that will be scrutinized below. In the present section I will try to formulate and comment the most important characteristics of the Indian development model.

The main features of the Indian economic model are the following:

1. The large role of the state in all spheres which, however, has diminished since 1991 (see Vijay Joshi and Little 1996; Malyarov 2010; Braghina 2010; Mahajan *et al.* 2011).

2. The state control over banking sector and quite strict currency regulations, which are gradually loosening (see Malyarov 2010).

3. The large role of large multi-sectoral private and state companies which coexist with abundant (up to 45–50 million) small and smallest businesses in industry and especially in services (see Braghina 2010; Malyarov 2010; The Main... 2012).

4. Predominance of the services sector, including financial and other ones, in the economic structure (see paragraph 5), accompanied with a rapid growth of industry (Ministry of Finance 2010; Braghina 2010; Malyarov 2010).

5. Large export high-tech sectors and professional services (information and communication technology (ICT), software engineering, outsourcing) which allowed India to occupy a special place in international labor division.⁸

6. Active attraction of foreign investments and technologies (see Revina 2009; Galischeva 2012).

7. Rather high savings rate, attention to infrastructure, scientific and technological innovations (see Scientific and Technological Achievements 2008; Lunyov 2009; Akimov 2010a).

8. Emphasis on domestic consumption, which serves as an engine of growth, in addition to export stimulation, import restriction and development of import substitution (Braghina 2010).⁹

9. An important role of the overseas Indian communities (see Cheshkov 2009; Akimov 2010a).¹⁰

Resources and advantages (presented in two aspects).

Among the advantages, which are India's historical peculiarities or achievements, are the following:

- *The widespread use of the English language*, especially among well-educated Indians, and dissemination of English literature and information: many books and periodicals are published simultaneously in Great Britain, India and the USA.

- *A considerable level of higher education in India and attention to fundamental sciences* that allows for training specialists in different areas (engineers, doctors, and economists, etc.) with sufficient competence and with a good command of English.¹¹

- *A large number of high-skilled workers in innovative fields* as a benefit of the first two advantages combined with the Indian government's special efforts (see Planning Commission 2008, Vol. 3: 255–256). First of all, this allowed creating a huge high-tech services sector (software, engineering, banking, management, accounting, legal, consulting, auditing and other business and information services; see Kurbanov 2012: 11),¹² which exceeds 100 billion dollars. It also provides the export of high-tech production of

⁸ See, for example, Dahlman and Utz 2005; Dossani 2008; Raychaudhuri and De 2012; Cong Liang 2012; on outsourcing see Ashmyanskaya 2007, 2008. In 2000–2006, this sector grew more than four times: from 7 to 30 billion dollars (*Idem* 2007: 7). Whereas in 1999 it amounted to 1.2 per cent of GDP, in 2008 it was already 7 % (*Idem* 2008: 20). The pharmaceutical industry based on production of the so-called generics, that is drugs with expired patent protection, is one of the most important industries in India. The world production of such drugs is supposed to double and reach 230 billion dollars by 2018.

⁹ Footwear industries can serve an example here. It is export-oriented in many developing countries, in particular in China, while in India only five per cent of its production is exported (see Akimov 2009: 9). Already in 1993, a famous Indian sociologist Rajni Kothary (1993: 77) pointed (though with sharp criticism) that India has formed a consumer society which has adopted an ultra-modernization model.

¹⁰ It is slightly reminiscent of the situation with Turkish communities in Germany in the 1960s, with the Mexicans – in the USA, except that the Indian emigrants are high-skilled and well-educated unlike Mexican semiliterate day-laborers and uneducated Turkish workers.

¹¹ The Indian specialists studied in Europe and especially in England for a long time. Since the nineteenth century that was an Indian advantage over China as the latter was for a long time a closed country or in a state of war. Independent India from the very beginning paid much attention to the level of higher education and the quality of trained specialists. It is indirectly confirmed by the fact that many specialists from India have been working in international organizations.

Certainly, the Indian system of higher education has many problems, including the task to *increase the number of universities and improve their quality of work* (O'Neill and Poddar 2008).

¹² According to the IT Department of Ministry of communications and information technologies, in 2011 the IT production and electronics output in India amounted 88.1 billion dollars (*i.e.* a 19 percent increase from that in 2010), including software and services – 76.1 billion dollars (Kurbanov 2012: 15).

knowledge economy. This is a rare and even a unique phenomenon for the Third World. Second, the *fact that such specialists are low-paid (by international standards)* provides the demand for their work in the USA and all over the world, realized both through recruitment in India and immigration. Of course, this involves a shortage of specialists in India, but at the same time promotes creation of large overseas community which is an important source of currency earnings, advanced concepts and contacts.

Problems as a downside of advantages. In developing countries (India is not an exception) many advantages can bring about problems as well. With respect to India these are: 1) *demographic resources* which are a source of unemployment, poverty and large-scale rural-to-urban migration; 2) *low living standards which attract manufacturers*. But poverty impedes progress, that is why elimination of poverty is the most important, complicated and expensive task. It is vitally important to solve it. But the solution will make the country's advantages disappear as well; 3) *large territory*, the development of which requires significant investments in infrastructure (according to some estimates, up to a trillion dollars); 4) *receptive domestic market* which plays a much more important role in India than in any other developing countries. But along with the market development the problem of protecting the small and smallest businesses from destructive competition of foreign and large-scale capital is rising.

To summarize, the most important peculiarities of the Indian model are as follows:

- *comprehensive state-led development strategy which regulates financial flows, investments and support of different sectors (large, small and foreign business);*
- *developed high-tech services sector and industry which are the basis of the Indian export;*
- *focus on development of domestic consumption rather than an intensive development of export sectors;*
- *significant role of overseas Indian communities with a large number of high-skilled workers;*
- *mineral wealth, particularly large deposits of iron ore and other metals, as well as coal, etc.*

2.4. Limitations of the Indian Model

The limitations are integral with advantages, first of all, with the extraordinary demographic resources. Besides, one should also take into account that in the near future an unprecedented number of young people will flood the Indian economy.

The social aspect. Rapid population growth makes issues of poverty, unemployment and illiteracy rather challenging. Besides, one should note that social tensions often exacerbate just at the moment when there appear opportunities to solve the problems in the short term. This circumstance can become the most important reason for social crisis and even collapse.¹³ One can clearly perceive that in India the growing expectations exceed capabilities and increase discontent, which is typical of countries with fast catching-up development (see, *e.g.*, Mehta 2012; Volodin 2008: 346–347). However, social unrest often causes the growth of ethnic, regional and separatist sentiments and movements.

The democratic government and traditions are India's advantages as they help to achieve a consensus and quell discontent when changing government and governing parties. But under certain circumstances they can give rise to political weakness, uncertainty,

¹³ On the nature of such modernization crises that tend to occur in many countries see Grinin 2012a.

growth of the populist and nationalist movements impact, conflicts, *etc.* (for an analysis of the current political situation see Mehta 2012).

So the future of the Indian economy and India as a powerful state depends on solidity of its social and political system. In my opinion, such strength is guaranteed to a degree by its current state system which is based on both the constitutional regulations confirmed at practice and on old traditions (*e.g.*, the elite's conviction in the necessity of seeking appropriate balance of power distribution between its different levels or views that consensus and ideological tolerance are more preferable than struggle). Mahatma Gandhi liked to emphasize 'the beauty of compromise' that allows achieving moral victory with the help of the opponent himself. All this holds out a hope that India has a safety margin and will not collapse when facing challenges.

The resource aspect. Enormous population will keep on growing over a long period and together with a planned rapid industrial and urban growth this will aggravate the urgency of old problems including the shortage of farmlands and fresh water (see Rastyanikov 2010; Goryacheva 2010). This requires agricultural intensification and investing in augmentation of water resources. India greatly relies on energy imports whose amounts will continue to grow (see BP 2012; Malyarov 2010; Volodin 2008; Skosyrev 2007).

Environmental protection is the country's most vulnerable problem. In this respect India follows China – the planet's leading environmental polluter (Melyantsev 2007). The necessity to substitute coal as the main fuel and energy resource will greatly aggravate Indian reliance on energy imports. Ecological problems are closely connected with the shortage of fresh water and farmlands, which are also included in the industry's sphere of interest.

Bureaucratic and political aspects. India has a strong state power, but bureaucracy puts severe obstacles on progress; corruption also tends to impede progress. We have already mentioned some political risks. In some cases the democratic form of government hampers decisive measures and reforms as the leaders have to consider voters' opinion. The political impasse is also quite frequent when a political party fails to take an advantage and then political (legislative) process stagnates. There is also a danger of strengthening foreign policy ambitions which can involve the country in unnecessary confrontation.

Overall, in spite of all dangers, India has no limitations to confound its hopes for successful development and becoming a leader. Of course, there is a possibility of *the middle-income trap*, when a country attains a per capita income of US \$10,000–15,000 and then cannot make a further decisive breakthrough. But India has not reached that level so far.

3. China and India: Common Features, Differences, Relative Advantages and Forecasts

India and China have always been compared to each other. Lately, this tendency has even intensified (see Syed and Walsh 2012; Zeng 2006; Winters and Yusuf 2007; Bardhan 2010; sections about these countries see in Khoros 2010) because the future of global economy depends on these countries' development. Not without reason, these countries have been often called to exchange experience (see Syed and Walsh 2012; Cong Liang 2012).

3.1. Similarities and Differences

In many respects, the common points are determined by similar tasks and problems the two countries face: maintenance of high growth rates, necessity to provide employment opportunities for youth, rapid urbanization, fight against poverty, agriculture underdevelopment, shortage of resources; poor environmental conditions, reliance on energy imports, *etc.*, as well as limited means of solving these problems, which include attraction of investments, innovations, infrastructure development and so on. The differences naturally stem both from historical, cultural and geographical settings and from different strategies.

Common features:

- large demographic resources;
- high savings rate;
- a big role of the state and public sector in economy and in regulating different spheres; stimulation of national corporations development; a big role of the state in infrastructure development;
- active attraction of foreign direct investments which are, however, regulated and canalized; a significant role of companies with foreign participation;
- export expansion and specific position in the international division of labor;¹⁴
- striving for technological progress, innovations and education development;
- rapid agricultural development which provides these countries with major food resources, though the productivity of agricultural labor is still rather low and there are a number of problems to solve;
- a lot of similar problems (in addition to those mentioned above are increasing income and regional inequality,¹⁵ poverty, permanent danger of inflation; insufficient political reforms; heavy national debt, *etc.*);
- each country has some important advantages promoting its successful development but all of them are quite specific (they have already been mentioned above);¹⁶
- both countries implemented the reforms without a full break with the past as happened in Russia, the CIS, and some countries of Eastern Europe. It is supposed to be a positive factor promoting high growth rates, whereas in Russia and some European countries the reforms were marked by a severe fall in GDP;
- the population of both countries positively evaluates major government's efforts and favors the high growth course and aspiration for leadership (about India see Mehta 2012; Rogozhin 2009; about China see Selischev A. S. and Selischev N. A. 2004; Berger 2006, 2009). Their leaders' ability to pursue a flexible policy and to alter the strategy is also important, although the possibilities for maneuver are limited by the peculiarities of their political systems.

Differences:

- although the reforms in both countries followed the path of reducing government control, in China the role of the state is traditionally more important, particularly in the banking and credit spheres. This determines many other differences;

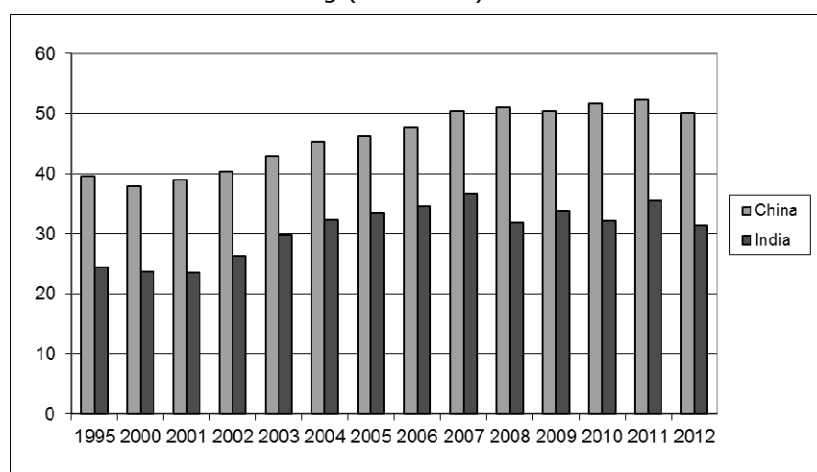
¹⁴ Here one should also mention the expansion of capital export (see Pakhomov 2012; Galischeva 2011; Lebedeva 2011; Kuznetsov 2012; Leksyutina 2012), although in China this is a more powerful process.

¹⁵ In China, the inequality between rural and urban population (as well as other regulations including different rights to retirement pension) is legalized, which helps to restrain the increasing discontent and endure privations, while in India this function is performed by the caste system.

¹⁶ Including the role of overseas ethnic diaspora. For comparison of peculiarities of the Chinese and Indian diasporas see Valeev 2011.

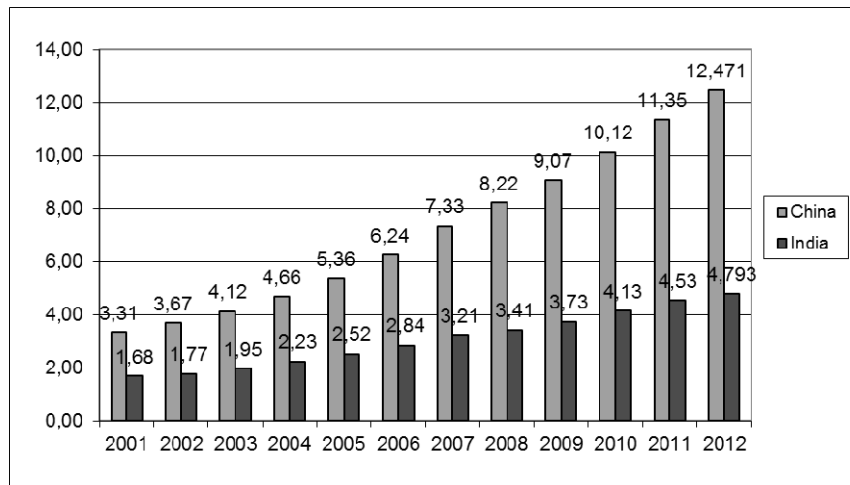
- China's savings rate is higher than India's: in 2007–2011 in China it exceeded 50 per cent, in India it was in the range between 32 and 36 per cent (see Diagram 1). This probably contributes to China's higher growth rates and larger GDP (see Diagram 2);
- in China, the economy is generally more export-oriented with a larger role of foreign investment than it is in India;
- the Indian economy is evidently more based on domestic consumption as a source of growth;
- the structures of the economy and export are different: in China industry and export of goods prevail, while in India this role belongs to services sector and export of services;
- due to its export orientation, China always has a positive balance of foreign trade, while India – a negative one;
- in India the role of private capital and small business is larger than in China;
- Indian companies are more often listed on stock exchanges;
- each country has its own economic mechanisms to drive the development – a kind of hallmarks of their success (in China these are special economic zones, in India – technological parks).

Diagram 1. Gross domestic saving (% of GDP)



Source: ADB 2014.

Note: Data for India, 2011, are quoted from http://be5.biz/makroekonomika/capital_formation/capital_formation_india.html.

Diagram 2. Gross domestic product at PPP (current international dollars, billion)

Source: ADB 2014.

3.2. Advantages over each other. Some Forecasts:

Difficult Thresholds on the Way to Mature Economy

The above analysis shows that both countries possess great opportunities and face great challenges. One should distinguish between medium-term (*i.e.* the next one-two decades – roughly up to 2030) and long-term prospects (*i.e.* over the next three to five decades – approximately up to 2050–2060). In the medium-term, it is worth considering growth rates, the present level of development and immediate tasks. In this respect China has considerable advantages. However, different crises and explosive aggravation of problems can occur, which will significantly change the situation. As regards the long-term prospects and dangers, the change of demographic situation will be of critical importance (fast population ageing and labor shortage in China and, on the contrary, India's still unexhausted demographic dividend and the fact that the Indian population will exceed the Chinese one [see Tables 2–3 and Diagram 3]). Besides, in our opinion, it is the state system's capacity to transform and cope with major problems that will be more important, rather than average annual growth rates. The latter will substantially decrease in both countries by that time. In other words, it is important who will be able to avoid catastrophe and/or overcome problems with less losses.

Advantages over each other: Indian democracy *versus* Chinese authoritarianism.

One can mention the following advantages over each other.

Political aspects. In the short run the necessity to consider the electorate's opinion, to seek political compromise and similar problems associated with the peculiarities of democratic power will be India's vulnerability. In this respect, the Chinese leaders have more opportunities, as they can ignore the voters' expectations. But in the long term, the democratic regime and different political powers' influence can turn to be India's definite advantage over China. First, with all shortcomings of India's government no one in the world doubts the foundations of its state system or calls for sweeping political reforms. There are no problems with observance of human rights and political persecution which are typical

for China. Thus, as compared with China, India will not have to undertake extensive political reforms, as its political system generally conforms to the modern standards. On the contrary, China's political system which has greatly contributed to its success will be more and more frequently criticized at home and abroad. The criticism will intensify coupled with growing living standards and increase of the middle class. In the situation of diminishing resources for economic growth and increasing government liability to citizens, substantial or radical changes in China's political regime are undesirable. The transition from authoritarianism to democracy is not only problematic but also very dangerous and can cause destabilization, extension of populism and the country's disintegration (in this respect, the USSR is a very instructive example). Nevertheless, it is quite possible that some circumstances, social expectations or internal political struggle (combined with outside pressure) will make leaders take that direction. The fact that the Chinese people have never lived under democracy can lead to a severe government crisis and affect economic development.

Of course, India also has certain obstacles on its political pathway. As literacy grows and poverty reduces, new voters will play an increasing role in determining a political party to rule, and this can significantly change the political landscape. There is a danger that India will stumble over political scandals, crisis of the ruling party, *etc.* before even reaching China's current level.¹⁷ On the other hand, China also has chances to gradually transform its political regime.

Political and ideological openness. India's another advantage is its greater openness and (in comparison with China) political-ideological resemblance to the West, despite all India's uniqueness. Besides, in the leading countries there are large Indian diasporas through which Western culture can penetrate into India.

Separatism threatens both countries. Dozens of ethnic groups populate China. But Han Chinese make up the vast majority of population. Therefore, the country's ethnic composition is more homogeneous than it is in India. With respect to the number of ethnic groups (more than 700), India is a unique country. In addition, it is a federation, whose states, according to the States Reorganization Act of 1956, were reorganized on linguistic basis. In short, given an appropriate public mood, there is a perfect opportunity for separation, as growth of living standards and literacy often awakes local nationalism. That is why India's disintegration on the basis of nationality and language is quite possible, though the traditions of consensus will most likely keep the country together. At present, separatist movements are active in the border territories of India and China (Tibet and Xinjiang in China, northwestern Jammu and Kashmir, Punjab, as well as northeastern states – in India).¹⁸ The dangers connected with hypothetical separation of restive states are difficult to assess. But I think the consequences of the separation of Punjab would not be as drastic for India as the separation of the western areas for China. Besides, one should take into account that separatism in western China enjoys much more international support than that in India. There is a real danger of separation of the western Chinese provinces during the transition to democracy. In China the transition to democracy can also generate various forms of nationalism due to the striking difference of the southern and northern provinces' dialects which dis-

¹⁷ According to some estimates, India can reach this level roughly by 2030 (*e.g.*, see NIC 2012: 15).

¹⁸ In the 2000s, Assam, Manipur, Nagaland were the most volatile states in North-East India (Likhachev 2011).

tinguishes Han Chinese from other groups. On the other hand, community traditions are very strong in China.

In short, there are a number of different scenarios for the future of India and China. Both countries risk drifting into a political and social crisis which may lead to a collapse. Still they have a chance to achieve economic maturity without disastrous consequences. But in general, if one estimates the potential of both countries to resist perturbations, India's chances seem better.

The demographic aspect. In the following decade, India will most likely catch up and overtake China in terms of population number; by that time each of these countries will have about 1.4 billion people. Then, India will lead the world in population (see Diagram 3). By 2050, India's population will probably reach 1.7 billion people (or a bit less), while in China, even if birth control (the one-child policy) is abolished, population will start declining (as forecasted by the UN, as early as in 2030).¹⁹ China's population by that time will reach 1.3–1.4 billion people (depending on the demographic policy). Consequently, by the second half of the twenty-first century India's population will be 20–30 per cent larger than China's. But the most important factor is that the difference in the size of economically active population will be much larger: in India it will be 30–40 per cent larger than in China. However, by that time both countries will face an ageing population problem, but China will suffer from it much more (see Table 2 and 3). According to the estimates, by 2050 about 30 per cent of China's population will be aged over 60 (United Nations 2002), while in India – only 15 per cent (or a bit more).

Table 2. Population Growth Rates (%)

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
China	1.4	1.1	0.8	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
India	2.1	2.1	1.8	1.8	1.5	1.6	1.6	1.5	1.4	1.5	1.4	1.4	1.4	1.3

Source: ADB 2012.

Table 3. Population aged 0–14 years (% of total population)

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
China	27.8	27.0	25.2	24.6	23.8	23.1	22.3	21.6	21.0	20.5	20.0	19.6	19.2	19.1*
India	37.8	36.4	34.5	34.1	33.7	33.3	32.8	32.4	32.0	31.6	31.2	30.8	30.4	30.2*

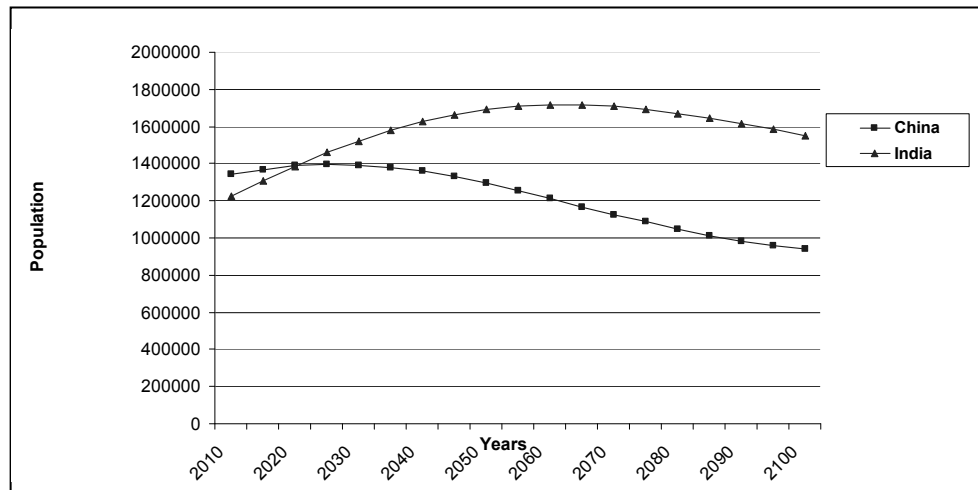
Source: ADB 2012.

Note: * = Provisional/preliminary/estimate/budget figure

¹⁹ Two demographic scenarios, the first of which implies a preserved restriction and the second – its abolition, will differ not in the expected maximum of China's population number (in the first case it will not achieve even 1.4 billion people, in the second one it will slightly exceed the number), but rather in the rate of the population decrease (drastic – in the former case and less dramatic in the latter one). Consequently, the size of the working-age population in two cases can be very different.

Thus, India's main long-term advantage over China is the huge demographic dividend which it can benefit for another 30 years, annually engaging in employment millions of young people. On the contrary, China will experience increasing labor shortages which will raise labor costs. Meanwhile, it will be easier for India to attract foreign capital and produce industrial capacities, taking advantage of low wages combined with rather developed infrastructure and abundance of qualified specialists in different areas. Though, as has been said above, such large numbers of potential of workers and urban dwellers threaten the country with severe trials.

Diagram 3. Population projections up to 2100 (the UN average estimates)



Source: Population Division... 2012.

Meanwhile, by 2030 India will significantly narrow the economic gap with China and by 2050–2060 it will be able to overtake or even surpass China in terms of GDP. Still China's production per capita will be larger, because, as mentioned above, India's population by that time will dramatically increase. At present there is a considerable gap in GDP (see Diagram 2).

We have already touched upon the **social aspect and resource scarcity**. The growing shortage of farmland and water resources, and increasing demand for fossil fuel, *etc.* may lead to troubles and crises in both countries. But, given the authorities' growing financial resources and increasing living standards, the problems are solvable to a certain extent.

Conclusion. New Economic Leaders in the World without a Leader

The analysis of the two giant states' development strategies and their potentials argues for the fact that in the next decades their role (and that of the developing countries as well) will increase, while the influence of the West will diminish. China and India will be certainly among the world leading economies in terms of GDP, but not always in terms of growth rates. As has been said above, China's growth rates will inevitably decelerate (among other things this will be caused by demographic problems). In long-term perspec-

tives, India has more resources to maintain a high growth rate; however, in this respect it will be constrained to yield to some fast-growing emerging countries.

It is easily arguable that we will face several upsurges in the peripheral countries, while the current leaders' growth rates will decelerate. Besides, globalization will launch a leveling process among developing countries. In other words, new states, currently representing an example of poverty and underdevelopment, could occasionally take the lead in terms of economic growth rates. Today scholars often speak about (and in the next decades will constantly discuss) a number of new fast-growing economies, including Vietnam, Bangladesh, Turkey, Indonesia, and Nigeria, *etc.*, which already deprive China of foreign investments and a part of the export market. In addition to the familiar acronyms BRIC and BRICS, many new acronyms appear, formed of combinations of different states. The common point for the states included in such combinations is the forecast of their fast economic growth (though one can find some states almost in every such a list, *e.g.*, Indonesia and Turkey). For example, already in 2005 the Goldman Sachs said about 'Next Eleven'²⁰ that this group of rapidly developing middle-tier countries would collectively overtake the EU-27 in global power by 2030 (Wilson and Stupnytska 2007; NIC 2012; O'Neill *et al.* 2005). In 2009, Robert Ward coined a new acronym CIVETS (Colombia, Indonesia, Vietnam, Egypt, Turkey, and South Africa). These countries are favored for several reasons, such as 'a diverse and dynamic economy' and 'a young, growing population' (Russell 2010).

In his article Jack Goldstone (2011) introduced an acronym TIMBI (Turkey, India, Mexico, Brazil, and Indonesia). Their combined GDP has already exceeded China's and will be growing much faster in the coming decades. The economist Jim O'Neill, who in 2001 invented the acronym BRIC, a decade later, coined a new one – TIMS – for the four fast-growing markets (Turkey, Indonesia, Mexico and South Korea). Of course, it is not the matter of more or less suitable acronym or economists' fancy for this game. This phenomenon actually reflects the growing importance of developing countries.

The analysis of the Indian and Chinese models, as well as those of other successfully developing countries, allow speaking about **common features of all fast-growing countries** (though with wide divergence of their development models), including the following characteristics: 1) state's active economic policy, including public provision for education; 2) a tendency of high gross domestic savings rate; 3) active FDI and technological flows; 4) export orientation (with simultaneous tendency for import substitution); 5) exploitation of cheap labor; 6) in many cases, aggressive exploration and extraction of mineral resources. Sometimes it is supplemented with country's benefits of diaspora engagement (*e.g.*, the Turkish diasporas in Germany) or geographical proximity to a developed state, for example, in Mexico, *etc.*

Finally, we can conclude that due to all transformations the world will face a fundamental reconfiguration. The USA position in the world will weaken at that. But those who suppose that another leader, for example China, will supersede the USA are quite mistaken. The weakening of the USA hegemony will not lead to the emergence of a new leader capable of substituting the USA in a comparable number of functions (Grinin

²⁰ Next Eleven consists of Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, The Philippines, South Korea, Turkey, and Vietnam.

2009a, 2011, 2012a, 2012b; Grinin and Korotayev 2010; see also NIC 2012: IV). Neither China, nor India will be able to assume the burden of such leadership because of economic limits and factors (the problem of poverty, social discontent, *etc.*), the lack of experience and required alliances, as well as the intolerable burden imposed by such leadership. So, despite the tendencies, a new absolute world leader will not emerge in the next decades. But a number of countries and associations will start dominating in different spheres. In short, we will have to live in a new situation and adapt to new realities.

References

- ADB (Asian Development Bank). 2014.** *Key Indicators for Asia and the Pacific 2012*. URL: <http://www.adb.org/publications/key-indicators-asia-and-pacific-2012>.
- Akimov, A. V. 2009.** India. Who is Stronger: An Elephant or a Whale? *Aziya i Afrika segodnya* 5: 6–9. *In Russian*.
- Akimov, A. V. 2010a.** The Project 'Indian Republic': A Success Story. *Aziya i Afrika segodnya* 1: 2–8. *In Russian*.
- Anderson, J. 2008.** The Economic Growth and State in China. A Lecture. *Polit.ru*. URL: <http://www.polit.ru/article/2008/07/17/china/>. *In Russian*.
- Arrighi, G. 1994.** *The Long Twentieth Century: Money, Power, and the Origins of Our Times*. London: Verso.
- Arrighi, G. 2007.** *Adam Smith in Beijing: Lineages of the Twenty-First Century*. London: Verso.
- Ashmyanskaya, I. 2007.** India and Global Outsourcing, or 'Bangalorization' of World Economy. *Aziya and Africa segodnya* 1: 6–10. *In Russian*.
- Ashmyanskaya, I. 2008.** Outsourcing: New Horizons for Global Economy. *Aziya i Afrika segodnya* 1: 18–22. *In Russian*.
- Bardhan, P. 2010.** *Awakening Giants, Feet of Clay: Assessing the Economic Rise of China and India*. Princeton, NJ: Princeton University Press.
- Berger, Ya. M. 2006.** The Results of the Tenth Five-year Plan and the Formation of a New Economic Growth Model. *Problemy Dalnego Vostoka* 3: 14–29; 4: 81–95. *In Russian*.
- Berger, Ya. M. 2009.** *The Chinese Economic Strategy*. Moscow: Forum. *In Russian*.
- Berthelsen, J. 2011.** Is This the China that Can't? *Asia Sentinel* May, 18. URL: http://www.asiasentinel.com/index.php?option=com_content&task=view&id=3200&Itemid=422.
- BP (British Petroleum). 2012.** *World Energy Outlook 2030*. URL: http://www.imemo.ru/ru/conf/2012/03022_012/03022012_prognoz_RU.pdf.
- Bhagwati, J. 2004.** *In Defense of Globalization*. New York: Oxford University Press.
- Boeing, P., and Sandner, P. 2011.** *The Innovative Performance of China's National Innovation System*. Frankfurt am Main: Frankfurt School of Finance & Management.
- Braghina, E. A. 2010.** Take-off in Indian. In Horos, V. G. (ed.), *Modern Problems of Development*. Materials of Theoretical Seminar at the Institute of World Economy and International Relations, the Russian Academy of Sciences (pp. 123–140). Moscow: Russian Acad-

- emy of Sciences. URL: <http://www.kavkazoved.info/images/myfls/files/razv2010.pdf>. In *Russian*.
- Braudel, F. 1981–1984.** *Civilization and Capitalism, 15th – 18th Century*. 3 vols. New York: Harper and Row.
- Buchanan, P. J. 2002.** *The Death of the West: How Dying Populations and Immigrant Invasions Imperil Our Country and Civilization*. New York: St. Martin's Griffin.
- Cheshkov, M. A. 2009.** From Cross Cultural to Wider Generalizations. *Mirovaya ekonomika i mezhdunarodniye otnosheniya* 3: 89–91. In *Russian*.
- Cong Liang. 2012.** Insights from the Comparison of Economic Development Patterns of India and China. The paper for the conference 'China and India: Sustaining High Quality Growth' at New Delhi, March 19–20, 2012. URL: <http://www.imf.org/external/np/seminars/eng/2012/chinaindia/pdfs/s2liang.pdf>
- Dahlman, C., and Utz, A. 2005.** *India and Knowledge Economy: Leveraging Strengths and Opportunities*. Washington, D.C.: World Bank.
- Dossani, R. 2008.** *India Arriving: How This Economic Powerhouse is Redefining Global Business*. New York: AMACOM.
- Eichengreen, B. 2011.** Slowing China. *Project Syndicate*. URL: <http://www.project-syndicate.org/commentary/eichengreen28/English>.
- Frank, A. G. 1997.** Asia Comes Full Circle – with China as the 'Middle Kingdom'. *Humboldt Journal of Social Relations* 76(2): 7–20.
- Galischeva, N. V. 2011.** India is a New Financial Donor. *Aziya i Afrika segodnya* 8: 16–22. In *Russian*.
- Galischeva, N. V. 2012.** What Attracts Foreign Investors to India? *Aziya i Afrika segodnya* 1: 29–35. In *Russian*.
- Goldstone, J. A. 2011.** *Rise of the TIMBIs*. URL: http://www.foreignpolicy.com/articles/2011/12/02/rise_of_the_timbis.
- Goryacheva, A. M. 2010.** What Future will the Asian Giant Face? *Vostok* 3: 107–115. In *Russian*.
- Grinin, L. E. 2009a.** Will the Global Crisis Lead to Global Changes? *Vek globalizatsii* 2: 117–140. In *Russian*.
- Grinin, L. E. 2009b.** The State in the Past and in the Future. *Herald of the Russian Academy of Sciences* 79(5): 480–486.
- Grinin, L. E. 2011.** Chinese Joker in the World Pack. *Journal of Globalization Studies* 2(2): 7–24.
- Grinin, L. E. 2012a.** *Macrohistory and Globalization*. Volgograd: Uchitel.
- Grinin, L. E. 2012b.** State and Socio-Political Crises in the Process of Modernization. *Clodynamics: The Journal of Theoretical and Mathematical History* 3(1): 124–157.
- Grinin, L. E. 2012c.** New Foundations of International System or Why do States Lose Their Sovereignty in the Age of Globalization? *Journal of Globalization Studies* 3(1): 3–38.

- Grinin, L. E. 2013.** Globalizations Tosses the Cards (Where does the Global Economic and Political Balance Shift). *Vek Globalizatsii* 2: 63–78. *In Russian.*
- Grinin, L. E., and Korotayev, A. V. 2010.** Will the Global Crisis Lead to Global Transformations? 2. The Coming Epoch of New Coalitions. *Journal of Globalization Studies* 1(2): 166–183.
- Grinin, L. E., and Korotayev, A. V. 2011.** The Coming Epoch of New Coalitions: Possible Scenarios of the Near Future. *World Futures* 67(8): 531–563.
- Grinin, L. E., and Korotayev, A. V., and Tsirel S. V. 2014.** Will the Chinese Upswing Stop? In Akaev, A. A., Korotayev, A. V., and Malkov, S. Yu. (eds.), *The Complex Systemic Analysis, Mathematical Modeling and Forecast of the BRIC Countries Growth: A Preliminary Research* (pp. 277–336). Moscow: KRASAND. *In Russian.*
- Khoros, V. G. 2009.** Civilization Factors of Development in Modern India. *Mirovaya ekonomika i mezhdunarodniye otnosheniya* 3: 91–94. *In Russian.*
- Khoros, V. G. 2010. (Ed.).** *The Modern Development Problems.* Materials of Theoretical Seminar at the Institute of World Economy and International Relations, Russian Academy of Sciences. Moscow: Russian Academy of Sciences. Moscow: IMEMO RAN. URL: <http://www.kavkazoved.info/images/myfls/files/razv2010.pdf>. *In Russian.*
- Korotayev, A., Zinkina, J., Bogevolnov, J., and Malkov, A. 2011.** Global Unconditional Convergence among Larger Economies after 1998? *Journal of Globalization Studies* 2(2): 25–62.
- Kothary, R. 1993.** *Poverty: Human Consciousness and the Amnesia of Development.* London: Zed.
- Kurbanov, S. A. 2012.** *Peculiarities of Modern India's Economy Development.* Ph.D. thesis. Moscow: Moscow State University. *In Russian.*
- Kuznetsov, A. 2012.** Transnational Corporations of BRICS Countries. *Mirovaya ekonomika i mezhdunarodniye otnosheniya* 3: 3–11. *In Russian.*
- Lebedeva, N. B. 2011.** Big Indian Ocean and Chinese Strategy ‘String of Pearls’. *Aziya i Afrika segodnya* 9: 6–13. *In Russian.*
- Leksyutina, Y. V. 2012.** The USA – China: Competition in Southeast Asia Exacerbates. *Aziya i Afrika segodnya* 3: 2–9. *In Russian.*
- Likhachev, K. A. 2011.** Ethnic Separatism in Northeast India: Old Problems in New Century. *Aziya i Afrika segodnya* 11: 45–49. *In Russian.*
- Lunyov, S. I. 2009.** About the Role of Scientific and Technological Factor. *Mirovaya ekonomika i mezhdunarodniye otnosheniya* 3: 83–84. *In Russian.*
- Mahajan, A., Datt, G., and Sundharam, K. P. M. 2011.** *Indian Economy.* 67 ed. New Delhi: S. Chand & Company.
- Malyarov, O. V. 2010.** *Independent India: Evolution of Socioeconomic Model and Economy Development.* 2 vols. Vol. 1. Moscow: Vostochnaya literatura. *In Russian.*
- Mandelbaum, M. 2005.** *The Case for Goliath: How America Acts as the World's Government in the Twenty-First Century.* New York: Public Affairs.

- Mereminskaya, E. 2013.** The Epoch 'Made in China' is Coming to an End. *Gazeta.ru*. January, 17. URL: <http://www.gazeta.ru/business/2013/01/17/4929661.shtml>. In Russian.
- Mehta, P. B. 2012.** Why Does Indian Economy Make No Progress? *Rossiia v globalnoi politike*. October, 28. URL: <http://www.globalaffairs.ru/number/Pochemu-Indiya-zabuksovala-15728>. In Russian.
- Melyantsev, V. A. 2007.** India's and China's Economic Growth: Dynamic, Proportions, and Consequences. *Mirovaya ekonomika i mezhdunarodnye otnosheniya* 9: 18–25. In Russian.
- Ministry of Finance. 2010.** *Economic Survey 2009–2010*. New Delhi: Ministry of Finance, Government of India.
- Ministry of Economic Development of the Russian Federation. 2012.** *India. Foreign Economic Activity*. URL: http://www.ved.gov.ru/exportcountries/in/about_in/ved_in/.
- Mondal, S. R. 2012.** Interrogating Globalization and Culture in Anthropological Perspective – the Indian Experience. *Journal of Globalization Studies* 3(1): 152–160.
- Myrdal, G. 1968.** *Asian Drama: An Inquiry into the Poverty of Nations*. New York: Twentieth Century Fund.
- Nasibov, I. 2012.** Scientific and Technical Potential of China: Results and Development Prospects. *Mirovaya ekonomika i mezhdunarodnye otnosheniya* 10: 79–83. In Russian.
- NIC – National Intelligence Council. 2012.** *Global Trends 2030: Alternative Worlds*. URL: www.dni.gov/nic/globaltrends.
- O'Neill, J., and Poddar, T. 2008.** Ten Things for India to Achieve its 2050 Potential. *Global Economic Paper* No. 169. New York: Goldman Sachs.
- O'Neill, J., Wilson, D., Roopa, P., and Stupnytska, A. 2005.** How Solid are the BRICs? *Global Economics Paper* No. 134. New York: Goldman Sachs. URL: <http://www.goldmansachs.com/our-thinking/topics/brics/brics-reports-pdfs/how-solid.pdf>.
- Pakhomov, A. A. 2012.** BRICS Countries in the World 'Club of Investors'. *Aziya i Afrika segodnya* 4: 16–23. In Russian.
- Planning Commission (Government of India). 2008.** *Eleventh Five Year Plan 2007–2012*. Vols 1–3. New Delhi: Oxford University Press.
- Planning Commission (Government of India). 2011.** *Faster, Sustainable and More Inclusive Growth. An Approach to the Twelfth Five Year Plan (2012–17)*. New Delhi: India Offset Press.
- Popov, V. V. 2002.** *Three Drops of Water. The Non-sinologist about China*. Moscow: Delo. In Russian.
- Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. 2012.** *World Population Prospects: The 2010 Revision*. URL: <http://esa.un.org/unpd/wpp/index.htm>.
- Rastyannikov, V. G. 2010.** *Agrarian India: Paradoxes of Economic Growth. The Second Half of the 20th Century – the Early 21st Century*. Moscow: Institut vostokovedeniya. In Russian.
- Raychaudhuri, A., and De, P. 2012.** *International Trade in Services in India: Implications for Growth and Inequality in a Globalizing World*. New Delhi – Oxford: Oxford University Press.

- Revina, E. Y. 2009.** Direct Foreign Investment in Indian Economy. *Vestnik Moskovskogo universiteta*. Vol. 6: *Ekonomika* 3: 39–47. *In Russian.*
- Rogozhin, A. A. 2009.** Unique Originality of India. *Mirovaya ekonomika i mezhdunarodniye otnosheniya* 3: 86–87. *In Russian.*
- Russell, J. 2010.** Geoghegan Digests and Delivers New Acronym. *Telegraph* July, 12. URL: <http://www.telegraph.co.uk/finance/comment/citydiary/7886195/Geoghegan-digests-and-delivers-new-acronym.html>.
- Scientific and Technological Achievements... 2008.** Scientific and Technological Achievements of India. *Mirovaya ekonomika i mezhdunarodniye otnosheniya* 5: 112–117. *In Russian.*
- Selischev, A. S., and Selischev, N. A. 2004.** *The Chinese Economy in the 21st Century*. St. Petersburg: Piter. *In Russian.*
- Skosyrev, V. 2007.** India. Is it a Coal-Powered Locomotive? Nuclear Deal with the USA will not Save India from Energy Deficit. *Aziya i Afrika segodnya* 7: 76–77. *In Russian.*
- Srinivas, T. 2002.** ‘A Tryst with Destiny’. The Indian Case of Cultural Globalization. In Berger, P., and Huntington, S. (eds.), *Many Globalizations: Cultural Diversity in the Contemporary World* (pp. 89–117). New York: Oxford University.
- Syed, M., and Walsh, J. P. 2012.** The Tiger and the Dragon. *Finance & Development* 49(3). URL: <http://www.imf.org/external/pubs/ft/fandd/2012/09/syed.htm>.
- The Main.... 2012.** The Main Components of Indian Economic Model. URL: http://www.webeconomy.ru/index.php?page=cat&cat=mc&mc=154&type=news&top_menu=&sb=120&newsid=882. *In Russian.*
- The USA National Intelligence Council. 2009.** *The World after the Crisis. The Global Trend – 2025: The Transformed World*. The Report of the USA National Intelligence Council. Moscow: Evropa. *In Russian.*
- The World Bank and the Development Research Center of the State Council of the People's Republic of China. 2012.** *China 2030. Building a Modern, Harmonious, and Creative High-Income Society*. Washington, D.C.: International Bank for Reconstruction and Development / International Development Association or the World Bank.
- Todd, E. 2003.** *After the Empire: The Breakdown of American Order*. New York: Columbia University Press.
- Valeyev, T. 2011.** India and China: Two Modernization Scenarios. *Ekonomicheskaya politika* 1: 170–175. *In Russian.*
- Vijay Joshi, and Little, I. M. D. 1996.** *India's Economic Reforms, 1991–2001*. Oxford: Oxford University.
- Volodin, A. G. 2008.** India. In Dynkin, A. A. (ed.), *World Economy: Outlook 2020* (pp. 330–348). Moscow: Magistr. *In Russian.*
- WIPO (World Intellectual Property Organization). 2012.** Patent Applications by Patent Office, Broken Down by Resident and Non-resident (1883–2010). URL: http://www.wipo.int/export/sites/www/ipstats/en/statistics/patents/xls/wipo_pat_grant_from_1883_table.xls.

- Wilson, D., and Stupnytska, A. 2007.** *The N-11: More than an Acronym*. Global Economics Paper No. 153. URL: <http://www.chicagobooth.edu/alumni/clubs/pakistan/docs/next11dream-march%20'07-goldmansachs.pdf>.
- Winters, L. A., and Yusuf, S. 2007.** *Dancing with Giants: China, India, and the Global Economy*. Washington, D.C.: World Bank.
- United Nations. 2002.** *World Population Ageing 1950–2050*. New York: United Nations.
- Yan Yunxiang. 2002.** Managed Globalization. State Power and Cultural Transition in China. In Berger, P., and Huntington, S. (eds.), *Many Globalizations: Cultural Diversity in the Contemporary World* (pp. 19–47). Oxford: Oxford University Press.
- Yu, M. 2013.** Never Mind the Fiscal Cliff, China is Headed For a ‘Real’ Cliff. URL: <http://www.theepochtimes.com/n2/china-news/never-mind-the-fiscal-cliff-china-is-headed-for-a-real-cliff-332318.html>.
- Yurlov, F. 2007.** From Colonial Dependence to Developing State. *Aziya i Afrika segodnya* 9: 4–11. *In Russian*.
- Zeng, D. Z. 2006.** How Technology and Innovation Drive Two Emerging Giants: China and India? *International Studies Review* 7(1): 1–27.
- Zitan, G. 2013.** The Truth about China's GDP Growth. URL: <http://www.theepochtimes.com/n2/china-news/the-truth-about-chinas-gdp-growth-334624.html>.

Energy Impact of Coming Eurasian Union and Relations between Russia and Turkey

Tuğçe Varol Sevim

Not so long ago Vladimir Putin declared to the world the formation of the Eurasian Union of Kazakhstan, Russia and Belarus and called all the former Soviet states to the Union. Hence, Russia officially announced a regional organization that resembles to European Union. Although Russia has Eurasian ideology and perspective, Turkey also has projections and ideological infrastructure for the initiative of Eurasia. It seems that Turkey will be in between of two regional organizations – the European Union to the west and the Eurasian Union to the east. It is well-known that Turkey is a long time candidate of the EU, yet the level of relations with the EU is in a trend of decline and relations with Russia are improving every year (including energy and trade areas of cooperation). In the near future, could Turkish foreign policy orientation shift to the Eurasian Union? Then, what will happen to Turkish and Russian cooperation on the energy issues?

Keywords: Eurasian Union, Russian Federation, Turkey, energy, pipelines.

Introduction

One of the Russian fundamental objectives behind the formation of the Eurasian Union is to secure and improve Russian energy strategy in terms of both oil and natural gas. Besides, Russia with Kazakhstan and Belarus announced the establishment of the Eurasian Union and called all near abroad states to join the new organization. Following that, during the negotiations between Russia and Ukraine on the issue of natural gas prices, Russia officially declared that if Ukraine joined the Eurasian Union, then they could get supplies at the domestic prices as Belarus do (this issue, however, has become irrelevant after the 2014 Ukrainian Revolution). On the one hand, Russia heads a new giant energy resource organization; Turkey is in a position of both consuming and transporting energy resources. For instance, Turkey supports the projects of Nabucco (a natural gas pipeline supported by the West), TANAP (originally an Azerbaijanian natural gas pipeline) and South Stream (the Russian project of natural gas pipeline). It seems that Turkey stands between Western, Caspian, and Russian pipeline projects including its own oil pipeline project of the Samsun-Ceyhan which is planned to carry Russian and Kazakh oil from the North to the South of the Turkey coast. In this sense, 'energy' factor will be the biggest impulse behind the Eurasian Union and during Putin's third term, the organization will be on top of the Kremlin's agenda. Therefore, as the number of players grows every year, the number of organizations grows too. At this point, the aim of this study is to analyze the energy relations between Russia and Turkey by taking into consideration the Eurasian Union and its energy impacts.

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Russian Foreign Energy Policy

Throughout history every nation tried to use its political leverage, economic relations, military capability and other available means in the most effective way to strengthen the nation's position in the international arena, and Russia is no exception. Therefore energy is the biggest tool for the Russian foreign policy. After the collapse of the USSR, although for Russia the first decade was catastrophic in terms of economics and social development, the second decade was a success for the Kremlin as a result of high incomes from energy exports. Furthermore, Russia managed to almost double its real GDP during Putin's first and second terms before the 2008 global crisis. During the global crisis of 2008–2009, Russian economy tested well, albeit economy numbers dropped in that period, and then began to improve by 3–6 per cent annually. On the other hand, compared to the economic crisis of the 1990s, Russia managed to control social stability in the country (Liuhto 2010).

Two thirds of Russia's exports consist of oil and gas and a quarter of the country's GDP is generated by the energy sector, 10 per cent by *Gazprom* alone. Approximately 40 per cent of the budget revenues originate from hydrocarbons (*Ibid.*). In 2008, Russia's oil and gas revenues were approximately 310 billion dollars – 66 per cent of Russia's total export revenues (Koyama 2009). Therefore, Russia's GDP has become increasingly dependent on oil and gas revenues (Beck *et al.* 2007). Putin's own words also underline the situation well, 'energy is, at least today, the most important motive force of world economic progress. The present and future prosperity of Russia depends directly on the place we occupy in the global energy context' (cited in Legvold 2008). Smith (2008) thinks that Putin has made it clear that Russia intends to use its energy export power to regain Russia's Cold War influence around the world, and particularly in Central Europe, the Caucasus and Central Asia.

The energy demands of the world (and competition over energy resources) grow every year. China, India, Europe, and the United States are the biggest consumers of hydrocarbon resources. It is estimated that up to 2030, these countries will require almost doubling of energy imports. Hence, Russia, Central Asia, and the Caspian region are increasingly important sources of energy for other countries, particularly in the West (Fredholm 2005). For instance, by 2030, gas imports into the EU could rise by another 200 bcm a year, from around 300 bcm today. At the same time, the most recent forecasts from the Russian experts are for an increase in gas exports of some 100 bcm per year by 2030 to all destinations, including the Asian markets (Cleutinx and Piper 2008; Helen 2010).

The Russian energy strategy aims at strengthening Russia's position in the global energy market and at maximizing the efficiency of the export possibilities of the Russian energy sector with the best prices. In order to implement this strategy, Russia uses its unique geopolitical location. In other words, the energy factor is a fundamental constituent of the Russian diplomacy (Fredholm 2005). An important aim of the Russian foreign energy policy is to establish common energy area among the CIS states. Initially, the goal is to strengthen, promote, and improve the integration of the common fuel and energy system for the benefits of its participants (*Ibid.*).

According to Kremlin, energy is a natural monopoly to be kept under state control. In order to fulfill this ambition, the Russian state works through some major companies such as *Gazprom*, *Transneft*, *UES* (Unified Energy Systems of Russia) (Fredholm 2005), and *Lukoil*. In order to increase control over oil production, the government controls Russia's oil and refined product pipelines, through the state-controlled company *Transneft*. This

monopoly gives the Russian government a leverage against Russian private companies, foreign investors and foreign countries, if needed (Woehrel 2009). Russian energy diplomacy is becoming increasingly active as the Russian government and Russian companies are seeking to alter the basis of existing relationships and develop new relationships on the basis of protecting relatively vaguely defined Russian national interests (Monaghan 2007).

In prevailing conditions, with the Caspian states becoming increasingly dependent on foreign capital, particularly American capital, and Russia's own financial means remaining limited, Russian goals have been threefold: first, to insist on the priority use by these states of the export infrastructure that Russia already has in place; second, to promote Russian oil and gas companies and help them to obtain the maximum shares possible in available projects; and third, to try to use a variety of instruments to block projects that do not promote Russia's perceived interests (Allison 2004). The strategic goals of Russia's foreign energy policy described below are based on two assumptions: 1) Russia's inherited desire to regain leverage in the post-Soviet space in order to become a great power; and 2) a possible rise of Russia's neighbor, China, into the world's leading economic power in the forthcoming decades (Liuhto 2010).

Dmitri Trenin (2008) asks the question, 'Should one worry about Russia as an energy superpower?' and gives the negative answer because according to Trenin, Russia's energy policy is much more about seeking profits than about establishing political domination. Furthermore, Saunders (2008) claims that Russia's energy wealth and power will encourage broader assertiveness in Moscow's foreign policy to the detriment of U.S. and European interests. Another argument is that the contemporary Russian energy policy is no longer a choice between staying West or going East; a combination of (geo)-political-economic considerations has resulted in a multidimensional policy (Shadrina 2010). Regionally, Russia seeks to move from 'good-neighborly' to 'friendly' relations with the former Soviet republics, and then to 'strategic partnerships and alliances' with those who wish it (Petro 2011). A decade ago Hill (2002) advocated the idea of Russia as an emerging energy power and even an energy superpower in the next 20 years. With the third Presidential term of Putin, Russia entered the second decade of Hill's perception.

Custom Union and Expansion of Eurasian Union

The Economic Union Treaty was signed in 1993 to encourage economic integration among the members (Obydenkova 2011) and the Customs Union initiative started in 1994 that would entail free trade between Russia, Kazakhstan, Belarus, and Kyrgyzstan, with Tajikistan joining in 1999 (Sakwa 2008). According to the first agreement signed between the parties, an economic union would be established following the formation of a multilateral free trade association, a customs union, a common market and a currency union (Shadikhodjaev 2009). Moreover, in 1999 five countries agreed on the Treaty of the Customs Union and Single Economic Space. When Vladimir Putin came to power, he initiated the idea of a new economic structure, which is called EurAsEC created by the five CIS Customs Union members in October 2000, and went into effect in April 2001 (Nygren 2008). The Customs Union of the Republic of Belarus, the Russian Federation and the Republic of Kazakhstan is an integrated customs area that forms a part of the Eurasian Economic Community and came into effect on January 1, 2010. It has a population of more than 165 million, a total GDP of \$2 trillion and a goods turnover of \$900 billion (Krotov 2012). Custom barriers were lifted for cross-border trade among the three states in

July 2011. Since January 2012, the Customs Union turned into a Common Economic Space in which questions over the rules on competition, transportation, agricultural subsidies and visa and migration policy started to be jointly regulated by the member states (Halbach 2012).

In terms of the energy relations between Russia and Belarus, Russia is the main hydrocarbon supplier of Minsk, while Belarus is one of the transit states of Russian hydrocarbon supplies. Many years, Russia actually supplied natural gas to Belarus at lower prices which helped the Belarus leader to keep his popularity and a reasonable standard of living. In other words, gas from Russia is not only vital for country's economic growth but also for political stability (Bruce 2005). While a share of Russian gas in energy consumption of Belarus economy is about 75–80 per cent, Belarus has a capacity of 13–15 per cent to fulfill its energy need by its own reserves (Manenok 2010). And Belarus transits of Russian oil and gas supply to Europe amount about 20 per cent and constitute 30 per cent of all the transits respectively. Due to Gazprom's ambition to buy the Belarus gas distribution company Beltransgaz, Russia attempted to buy assets of Beltransgaz in September 1993. The Russian side offered to double its gas deliveries to Belarus by 2000 and in return transfer Beltransgaz to Gazprom control for 99 years (Bruce 2005). Although the agreement was signed between Beltransgaz and Gazprom, the agreement was not ratified by the Belarusian parliament. Afterwards, as a result of the swelling debt of Minsk, Gazprom increased pressure on Belarus to pay its overdue payments that Belarus refused to pay. Therefore, Russia reduced gas supplies to Belarus twice (1997 and 1998) and demanded cash payment instead of barter (Götz 2007). Lukashenko refused to privatize Beltransgaz, because he was heavily dependent on profits from the gas sector for his political livelihood (Zaitseva 2005).

During Putin's second term, at the end of March 2006, right after the presidential elections that confirmed Lukashenko in office for another 5 years, Gazprom announced that it would raise the gas prices starting from 2007 according to the market prices (PONTIS 2007). At the first stage of the negotiations, Gazprom claimed that Belarus should pay \$200, but then lowered the price down to around \$100. Still, Belarus insisted that this would be a violation of the Customs Union Agreement, according to which Belarus should receive gas at Russian domestic prices (Yafimava and Stern 2007). Finally Belarus agreed to pay US\$ 100 in 2007 that doubles the previous price.

Table 1. Gas prices paid by Ukraine, Moldova and Belarus in 2006–2007 (in \$/tcm) (Gromadzki and Kononczuk 2007)

	2005	2006	2007
Ukraine	50	95	130
Moldova	80	110–160	170
Belarus	47	47	100

Additionally, Belarus received stabilization loans amounting to US\$ 1.5 billion from Russia to offset increased energy costs (Dura 2008). Another crisis between Russia and Belarus in June 2010 once again revealed the subject of the debt payments (Yafimava 2010). Finally, in July 2010, Beltransgaz and Gazprom agreed on the prices and payment schedules. While stepping towards the integration with Russia and Kazakhstan, Minsk began to get rewards from Moscow. For instance, in the middle of 2011, it was announced that Bel-

arus would get \$3–3.5 billion from the EurAsEC anti-crisis fund.¹ Moreover at the end of 2011, Belarus and Russia agreed on 2012–2014 gas contracts. According to the new contract, Belarus will pay \$164 per 1000 cubic meter for Russian gas in the first quarter of 2012 compared with an average price of \$400 paid by European countries. The deal also included the increase of Gazprom's stake in Beltransgaz from 50 to 100 per cent. As a result, Belarus won the cheap price for its budget and gave up its income from Belarus gas market.²

Kazakhstan is a landlocked country and has common borders with Russia, China, Uzbekistan, Kyrgyzstan, and Turkmenistan. At the beginning of its independence, Kazakhstan declared 'multivectoral' foreign policy, which means a willingness to develop and improve strategic, diplomatic and economic relations with major geopolitical powers, namely China, Russia, the United States, and Europe. However, multivectoral foreign policy of Kazakhstan turned into 'bilateralism' as seen in the process of proximity between Russia and Kazakhstan in recent years (Wood 2008). Since independence Russia has remained Kazakhstan's most important economic partner, especially for Kazakh energy export, which is still heavily dependent on Russian controlled pipelines constructed during the Soviet period (Weitz 2008). In 2005, the President of Kazakhstan Nursultan Nazarbayev outlined his foreign policy priority in the following way: '...we have a choice between remaining the supplier of raw materials to the global markets and waiting patiently for the emergence of the next imperial master or to pursue genuine economic integration of the Central Asia region. I choose the latter' (Blank 2005). Few years later, during the Second Astana Forum in March 2009, Nazarbayev said that the integration process should continue under the aegis of the Customs Union (Vinokurov 2010).

Kazakhstan has the Caspian Sea region's largest recoverable crude oil reserves and its production reached to 81.6 m/t in 2010 (BP 2011). Kazakhstan's growing petroleum industry accounts for roughly 30 per cent of the country's GDP and over half of its export revenues (Barry 2009). Although Kazakhstan consumes slightly more than it produces, domestic consumption has been increasing at 9.5 per cent per year in the last decade compared with production growth of 22 per cent per year. Natural gas production of Kazakhstan was 33.5 bcm in 2010 and almost 12 bcm was exported to Russia (BP 2011). According to EIA, Kazakhstan is shifting from being a net natural gas importer to becoming a net exporter within the next few years (EIA 2009). KazRosGaz will actually determine the energy relations between Russia and Kazakhstan. Gazprom and KazMunaiGaz formed KazRosGaz joint venture in June 2002 aiming to buy and sell gas and process it at Russia's gas treatment facilities. As a result of the process of the Customs Union, Kazakhstan expects large Russian investments into Kazakh gas fields and an increase in gas production. For that reason, Russia and Kazakhstan signed an intergovernmental agreement on the joint geological survey and exploration of the Imoslevsky gas condensate field.³

In terms of political expansion, the Eurasian Union will increase Russia's weight in the world political arena in order to become a superpower again or at least manage to voice multipolar system. In this respect, according to Putin's first proposal, target countries are

¹ Ria Novosti. Belarus to Get \$3 bln loan from EurAsEC – Premier. May 19, 2011. URL: <http://en.rian.ru/business/20110519/164117956.html>.

² Ria Novosti. Lukashenko Says Beltransgaz Sale to Gazprom 'Very Profitable'. December 23, 2011. URL: <http://en.rian.ru/world/20111223/170444388.html>.

³ Gazeta.Kz. Gazprom Increases Gas Exports to Kazakhstan by 10% in 2011. January 19, 2012. URL: <http://engarticles.gazeta.kz/art.asp?aid=356030>.

Kyrgyzstan and Tajikistan which are small and economically weak countries of the CIS. Esengul (2012) thinks that they will support the scheme not only because their societies are loyal toward Russia and Russians, but also because their economy and security depend on Russia. It is no secret, that the EurAsEC will be the economic pillar of the Eurasian Union. For that reason, it was announced that the preparations to sign the agreement on the Eurasian Economic Union, composed of Russia, Belarus, Kazakhstan, Kyrgyzstan and Tajikistan, must be completed by January 1, 2013.⁴ In other words, economic cooperation between the post-Soviet states has started to gain momentum, although in different forms and in varying combinations of its participants. Within this context, the intention of Russia, Kazakhstan and Belarus to move to the next stage of economic integration and to establish a full-scale economic union by 2015 constitutes an important part of this process (Chufrin 2012).

In this context, Ukraine, Moldova, Azerbaijan, Armenia, Turkmenistan, Uzbekistan, and Georgia will be the target countries for the second wave of expansion of the Russian influence. Although it is known that most of the CIS countries have certain limits of interest to become a member of the Eurasian (Economic) Union (Hoffmann 2012), Ukraine is a significant target country for Russia. In the Ukrainian case, Russia employs the gas prices in order to convince Kiev to become a member of the Customs Union. While Ukraine complains about high gas prices, Russia responds that, 'if you become a member of the Customs Union like Belarus, you can get natural gas at the domestic prices' (Olearchyk 2011). Gas prices are significant for Ukrainian problematic economy and before the 2014 Revolution Ukraine even considered joining the Eurasian Economic Union rather than the Eurasian Union (in a short term this resembles the Turkish case in the European Union at some points).

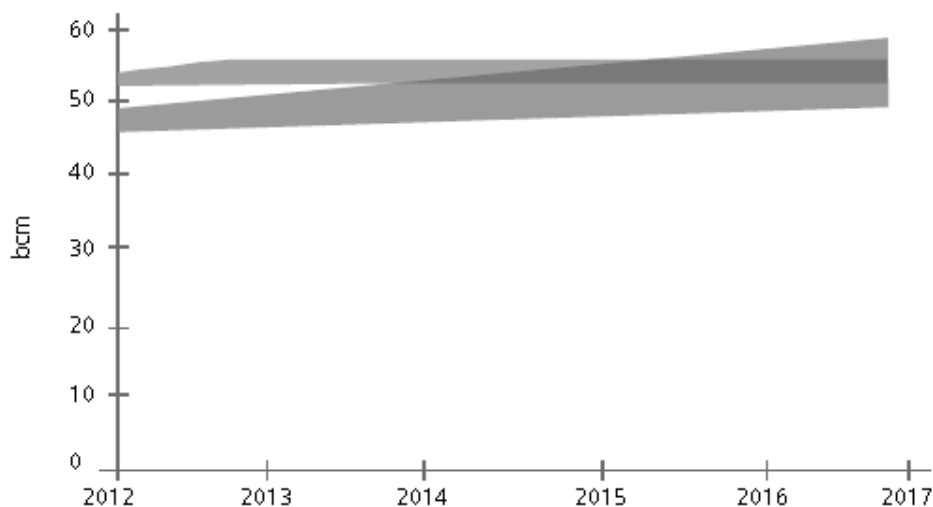
On the other hand, Uzbekistan and Turkmenistan do not display an interest in the idea of the Eurasian Union. The President of Uzbekistan Karimov has stated that Moscow's strategies of integration represent no more than a return to a disguised Russian imperialism and that his country had no need for integration with 'a political flavor' (Laurelle 2012). Turkmenistan also aims to be the Switzerland of Central Asia and attempts to stay away from a regional organization that required strict loyalty. And Azerbaijan is the only country that has access to western markets and that has broken the monopoly of Russian pipeline system. Therefore, it is likely that Azerbaijan will resist the political expansion of the Eurasian Union. Nevertheless, Armenia, Moldova, South Ossetia and Abkhazia are the weakest links of the CIS region. South Ossetia and Abkhazia might consider joining such an organization in order to gain international recognition that would divide Georgia and redraw the Caucasian map. Moreover, Armenia is highly dependent on Russian energy resources and geographically isolated. Instead, Russia might be unwilling to disrupt Azerbaijan-Russian relations with the early membership of Armenia. And finally Moldova (that is an important country for the transmission of Russian energy supplies) has domestic problems with its Transnistria region. If Moldova resists Russian foreign policy or energy policy interests, the Kremlin might provoke Transnistria to join the Customs Union or the Eurasian Union afterwards. Still, the range of expansion is not clear, because so far there are no criteria or obligations for membership modified by the founders of the Customs Union. Most probably, President Putin will determine expansion according to the Russian national interests.

⁴ Ria Novosti. Putin Says Deal on Eurasian Economic Union Must be Ready by 2013. May 19, 2011. URL: <http://en.rian.ru/russia/20110519/164123753.html>.

Russia-Turkey Energy Relations

After the end of the Cold War, Turkey has improved its geopolitical importance in terms of energy politics as a result of new pipelines either constructed for Turkish demand or passing through Turkish lands to reach world markets (Tekin and Walterova 2007). Therefore, particularly after the construction of the Blue Stream natural gas pipeline, Turkish demand for natural gas increased, and as a result Turkish economy revealed as a consumer, transporter and producer in terms of hydrocarbon supplies. According to the EIA results, Turkey is one of the fastest growing energy economies of the world and it is expected by the Turkish Ministry of Energy and Natural Resources that energy demand of Turkey will double in 15 years (Turkish Ministry of Foreign Affairs 2009: 1). The latest Deloitte report about the Turkish natural gas market (published in March 2012) also marks the urgent need of gas for Turkey's economy in short term due to the Turkish economic growth.

Graph 1. Demand and Supply Projection of Turkey (Deloitte 2012)



Although Turkey is highly dependent on energy exports, it is also considered as a 'natural bridge' between Central Asia, the Caucasus and Europe. For instance, concerning the oil transportation, according to the Turkish Ministry of Foreign Affairs, 3.7 per cent of the world's daily oil consumption is shipped through the Turkish straits (Baykal 2009). According to the Turkish Energy Strategy Paper 2012–2013 published by Turkish Ministry of Energy, the Turkey aims at accomplishing several objectives which are boasting supply security and Turkey's influence in regional and global energy markets, protecting the environment, making greater use of domestic resources and restructuring the legal-institutional infrastructure of the national energy market (Kardas 2010). In terms of energy politics, the Russian Federation is Turkey's main partner for many years, because Turkey is dependent not only on Russian natural gas for about 50 per cent, but also on Russian oil for about 35 per cent. Other than that Turkey is part of the gas pipeline projects aimed at bypassing the Russian monopoly pipeline system in order to reach the Caspian or Middle East reserves. Besides, Turkey has its own oil pipeline project aimed at transporting Russian and Kazakh oil from the Black Sea Coast to the Mediterranean Coast of Turkey.

Table 2. Oil and Natural Gas Pipeline Projects Related to Turkey (Sevim Varol 2011)

Project	Type	Measure/annually	Countries	Route	Estimated Date	Cost
South Stream	Natural Gas	63 bcm	Gazprom-Russia, ENI-Italy	Total route is 2.000 km including 900 km subsea route of Black Sea. Bulgaria, Serbia, Hungary and Austria, Slovenia, Italy	2015	€12.8 billion
Nabucco	Natural Gas	31 bcm	BEH-Bulgaria, BOTAS-Turkey, MOL-Hungary, OMV-Austria, RWE-Germany, Transgaz-Romania	Total is 3.300. After passing through Turkey enters orderly Bulgaria, Romania, Hungary and Austria.	2018	€7.9 billion
TANAP	Natural Gas	16–24 bcm	Azerbaijan, Turkey	Total route 2.000 km	2017	€5–8 billion
Burgas-Alexandroupolis	Oil	35–50 m/t	Russia, Bulgaria, Greece	280 km	2014–2015	€1 billion
Samsun-Ceyhan	Oil	50–70 m/t 25–30 m/t	Russia, Turkey	Pipeline will reach Ceyhan port in Mediterranean coast of Turkey after passing through the Black Sea and enters from Samsun port.	2015	US\$ 5.6 billion

At the end of 2011, there were two developments regarding Russia-Turkey energy relations. First, Turkey and Azerbaijan signed a new agreement on the natural gas pipeline TANAP whose capacity will be 16–24 bcm. By signing that deal both Turkish and Azeri sides suspended the Nabucco pipeline project and structured a new rival project against Russia's South Stream gas pipeline. Western countries support Turkey as an alternative route from the Caspian Sea to create competition to Gazprom and Russia. Furthermore, some Caspian producers also perceive Turkey as a better transit country for their exports. This fuels the rivalry between Russia and Turkey in the energy field and forces Russia to take into consideration the importance of Turkey in the geopolitics of the region (Tekin and Walterova 2007). Secondly, few days after the signature of TANAP, Turkey confirmed the official permission for the construction of South Stream pipeline project. Not long ago Nabucco and South Stream seemed to rival to each other. According to some Western and Russian analysts, now TANAP and South Stream seem to be new competitors for the European energy market and Turkey is in the middle of this competition. With the advent of TANAP project there had been raised questions, especially in the West,

about the possibility of implementation of the Nabucco project. The answer was found when Nabucco Company announced that it had changed its name to Nabucco West that would bring Caspian gas from the Bulgarian-Turkish border to Baumgarten and beyond.⁵ Although its name is still 'Nabucco', one thing is certain, and it is that Turkey is out of Nabucco. Furthermore, in the middle of 2013, the Nabucco Company was abolished and withdrew from the energy game.

Another important aspect of Russian-Turkish energy relations is the Samsun-Ceyhan oil pipeline planned to carry crude oil between the Black Sea oil terminal in Samsun and Mediterranean oil terminal in Ceyhan/Turkey. The 550-km pipeline has a normal capacity of 1.5 mil/bbl/d (Popovici 2009). The aim of this project is to provide an alternative route for Russian and Kazakh oil and also ease the traffic burden of the Bosphorus and the Dardanelles. It is expected that the Russian oil production will reach 11.5 m/bbl per day by 2030, regarding that the Russian consumption anticipated to grow more slowly than production, export capacity would eventually increase (Roberts 2007). At this point, how will these oil output reach markets, regarding that the Turkish straits are limited? It is well known that the Kremlin supported the idea of the Burgas-Alexandroupolis Pipeline (BAP) to bypass the Turkish straits, then how Russian energy strategy changed towards to dependence on Turkish lands for the Russian oil export instead of the BAP option? In this context, Russia chose to support the Samsun-Ceyhan pipeline project in exchange for the Turkish support of South Stream. It is a geopolitical opportunity to accomplish a historical project for the Turkish foreign policy and economy. During St. Petersburg Economic Forum in June 2011, the Russian deputy Energy Minister told that Russia remained committed to the BAP; and then Energy Minister Sergei Shmatko stated that 'today within the sidelines of the talks we are holding, there is no chance for development on the project. Being aware about the position of the current Bulgarian government we do not expect any progress' (Kennedy 2011). However, it is clear that the BAP is still on the agenda of the Russian administration, because Russia has reiterated its determination to construct the Burgas-Alexandroupolis oil pipeline and reduce the price tag of the project, following Bulgaria's withdrawal (Balkans 2012).

No doubt that the Russian main target is to accomplish the South Stream gas pipeline project and avoid or at least suspend other rival projects. Thus, Russia will increase its dominant status over the European gas market and guarantee its energy export income, which is vital for its energy export-oriented economy. In order to achieve this goal, Russia must guarantee to purchase Central Asian gas import to Gazprom due to reason that Russian own natural gas production capacity is not sufficient to fulfill its export requirements. At first stage, Russia will expand the Customs Union by the membership of Kyrgyzstan and Tajikistan and will pressure Uzbekistan to join the Union. Under these circumstances, Russia will increase its great power status in the region and will keep foreign energy policies of Uzbekistan and Turkmenistan harmonious to Russian national interests. At the second stage, Russia shall effort to guarantee gas market of Europe by increasing its market representation in the energy sector of Europe. For instance, Gazprom announced its intention to purchase Greece's DEPA (the state owned gas company) in 2012 (Bouras 2012). Moreover, Bulgaria is also highly dependent on Russian energy resources that withdrew from the BAP, but not from South Stream. Hence, Russia tried to avoid or suspend TANAP's efforts to reach South European markets before South Stream by increasing its

⁵ See <http://www.nabucco-pipeline.com/portal/page/portal/en>.

market representation and decision-making role in the region. And if TANAP would not find a market to sell its gas until 2017, Azerbaijan might consider selling its whole surplus gas to Russian Gazprom instead of Europe (UPI 2012). As a result, Russia forced Azerbaijan to choose the Trans-Adriatic Pipeline (TAP) in Southern Europe and leave Central Europe gas market to Gazprom. In 2013, Azerbaijan declared that consortium members had selected the TAP for TANAP and had suspended the TANAP-South Stream pipeline rivalry for a while. In order to guarantee South Stream gas supply, Russia will definitely need Central Asian gas resources in the near future. Therefore, it is expected that Russia will employ Central Asian gas (prospect Eurasian Union members) to surround Europe and Turkey and will try to control Azerbaijan gas routes.

The creation of the Eurasian Union will form a giant 'Energy Union' in the north and east of Turkey with the advantages of determining routes and prices as well. First of all, Turkey is highly dependent on export of oil and natural gas and pays high bills every year from its budget. The main aim of Turkey (and the European countries as well) is to provide reliable and cheap energy resources. However, the advent of such a union will provide a great advantage to the Kremlin in order to determine prices and impose foreign policy actions. The main question is whether Russia will offer Turkey to become a member of the Customs Union and receive cheap gas on terms of Turkish withdrawal from the European Customs Union. It is not so easy to answer it but it is worth considering. Europe is a significant export and import market for the Turkish economy; however the latter needs much more gas with its current economic growth rates that means high natural gas bills annually. In addition, Russia and vast Eurasia promises a new market for the Turkish economy. It is possible that as long as Turkish membership of the European Union is delayed, Turkey will be much more close to Russia and Eurasia. The fact that Turkey was accepted as a 'dialog partner' into the Shanghai Cooperation Organization well exemplifies this proximity approach.

Conclusion

Since the formation of the Russian Federation from the heritages of the Soviet Union, energy resources turned out to be the main pillars of the Russia foreign policy due to energy export income for the budget. Therefore, in order to sustain its dominance over energy pipelines, Russia focused on keeping its 'Near Abroad' close to Russian politics by means of new regional organizations. The Eurasian Union is the latest version of a regional organization in this part of the world that has the capacity to accelerate the energy groupings as well. One of the main questions is whether Russia aims at creating a respective energy grouping. In this sense, evidence of many centuries demonstrates that Russia cannot survive without creating an influence area. But this time, Russia looks for creating economic and diplomatic dependency of the 'Near Abroad' states on Moscow, instead of sending troops to these regions.

Inherently, Russia aims at strengthening, promoting and improving the integration of common energy system by signing long-term supply contracts, exploration and production contracts and buying assets of energy companies of these countries. Within such a scenario, Russia would probably reveal itself as an energy superpower of the world which is capable of influencing both Asia and Europe through the ways of pipelines. In this context, Turkey will definitely be affected by the developments of the Eurasian Union in the region. Integration of Belarus and Kazakhstan with Russia under the umbrella of the Customs Union and its growing influence area is significant for the Turkish foreign policy,

because Turkey is highly dependent on Russian hydrocarbon reserves and pays considerable prices every year. Moreover, according to some reports, Turkey's natural gas and oil consumption will grow, yet Ankara could not manage to sign a supply contract in order to satisfy short-term requirements. Due to the geographic location of Turkey, the list of oil and natural supplier countries is restricted to a few countries such as Azerbaijan, Iran and Iraq. As long as Russia has a significant role in Turkish energy requirements, Turkey should accurately observe the evaluation of the Eurasian Union.

The period of 2012–2013 was a time of competition between South Stream and TANAP natural gas pipelines and between Samsun-Ceyhan and Burgas-Alexandroupolis oil pipelines. However, the rivalry between these two pipelines was not terminated. As, on the one hand, Turkey is highly dependent on Russian energy supply and wants to construct a new oil pipeline that would tighten energy relations between Russia and Kazakhstan. And, on the other hand, Turkey wants to establish the TANAP gas pipeline with Azerbaijan that would diminish the importance of South Stream and prevent the expansion of the Eurasian Union to the Caspian region. It seems like a chess game that both Ankara and Moscow should play inevitably. It is expected that Russian and Turkish energy cooperation in the region will continue, because it is too risky for Turkey to stand as a challenger against the Russian energy projects.

References

- Allison, R. 2004.** Strategic Reassertion in Russia's Central Asia Policy. *International Affairs* 80(2): 277–293.
- Baykal, A. 2009.** Turkey's Energy Politics. House of Commons Library, SN/IA/5301, International Affairs and Defense Section.
- Balkans 2012.** Russia will Insist on Executing the Burgas-Alexandroupolis Project Given Minimization of Costs on It. *Balkans Business News Correspondent* 28 March. URL: <http://www.balkans.com/open-news.php?uniqueNumber=140386>.
- Barry, M. P. 2009.** Foreign Direct Investment in Central Asian Energy: A CGE Model. *Eurasian Journal of Business and Economics* 2(3): 35–54.
- Beck, R., Kamps, A., and Mileva, E. 2007.** *Long Term Growth Prospects for the Russian Economy*. European Central Bank. Occasional Paper. 5. March.
- Blank, S. 2005.** China, Kazakh Energy, and Russia: An Unlikely Menage a Trois. *The China and Eurasia Forum Quarterly* 3(3): 99–109.
- Bouras, S. 2012.** Greece Natural Gas Shale Gets Interest. *Dow Jones Newswires* 27 March. URL: http://www.rigzone.com/news/article.asp?a_id=116430.
- BP 2011.** Statistical Review of World Energy. URL: http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/pdf/statistical_review_of_world_energy_full_report_2011.pdf.
- Bruce, C. 2005.** *Friction or Fiction? The Gas Factor in Russian-Belorussian Relations*. Russian and Eurasian Programme. London: Chatham House.
- Chufrin, G. 2012.** A Difficult Road to Eurasian Economic Integration. *Russian Analytical Digest* 112.
- Cleutinx, C., and Piper, J. 2008.** The EU-Russia Energy Dialogue. In Barysch, K. (ed.), *Pipelines, Politics and Power, the Future of EU-Russia Energy Relations* (pp. 25–33). London: Centre for European Reform.

- Deloitte 2012.** *Türkiye doğal gaz piyasası – Beklentiler, gelişmeler 2012*. March. URL: http://www.deloitte.com/assets/Dcom-Turkey/Local%20Assets/Documents/turkey_tr_enerji_dogalgaz_200312.pdf
- Dura, G. 2008.** The Eurasian Union's Limited Response to Belarus. Pseudo New Foreign Policy. *CEPS Policy Briefs* 151.
- EIA – Energy Information Administration 2009.** Kazakhstan: Country Analysis Briefs. November. URL : <http://www.eia.doe.gov/cabs/Kazakhstan/pdf.pdf>.
- Esengul, C. 2012.** Does the Eurasian Union Have a Future? ADBI Institute. March 27. URL: <http://www.asiapathways-adbi.org/2012/03/does-the-urasian-union-have-a-future/>.
- Fredholm, M. 2005.** *The Russian Energy Strategy and Energy Policy: Pipeline Diplomacy or Mutual Dependence?* Conflict Studies Research Centre. Russian Series 05/41. Watchfield: Defence Academy of the United Kingdom.
- Götz, R. 2007.** Ukraine and Belarus: Their Energy Dependence on Russia and Their Roles as Transit Countries. In Hamilton, D., and Mangott, G. (eds.), *The New Eastern Europe: Ukraine, Belarus, Moldova*. Center for Transatlantic Relations (pp. 149–167). Washington, D.C.: Austrian Institute of International Affairs.
- Gromadzki, G., and Kononczuk, W. 2007.** *Energy Game: Ukraine, Moldova and Belarus between the EU and Russia*. Warsaw: Stefan Batory Foundation.
- Halbach, U. 2012.** Vladimir Putin's Eurasian Union. *SWP Comment* January. URL: http://www.swp-berlin.org/fileadmin/contents/products/comments/2012C01_hlb.pdf.
- Helen, H. 2010.** The Eurasian Union's Energy Security Dilemma with Russia. *POLIS Journal* 4. Winter.
- Hill, F. 2002.** Russia: the 21st Century's Energy Superpower? *The Brookings Institution*. Spring. URL: <http://www.brookings.edu/research/articles/2002/03/spring-russia-hill>.
- Hoffmann, K. 2012.** Eurasian Union – A New Name for an Old Integration Idea. *Russian Analytical Digest* 112: 2–4
- Kardaş, Ş. 2010.** Turkey Unleashes New Energy Strategy Plan. *Eurasia Daily Monitor* 7(83).
- Kennedy, Ch. 2011.** Russia Remains Committed to Burgas-Alexandroupolis Oil Pipeline. *OilPrice.com*. 18 June. URL: <http://oilprice.com/Latest-Energy-News/World-News/Russia-Remains-Committed-to-Burgas-Alexandroupolis-Oil-Pipeline.html>.
- Koyama, K. 2009.** Energy Geopolitics of Russia and the Global Energy Security. *IEEJ* July.
- Krotov, I. 2012.** Customs Union between the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation within the Framework of the Eurasian Economic Community. *World Customs Journal* 5(2): 129–138.
- Laurelle, M. 2012.** Near Abroad Looks at Russia: The Eurasian Union Project as Seen from the Southern Republics. *Russian Analytical Digest* 112.
- Legvold, R. 2008.** Russia's Strategic Vision and the Role of the Energy. NBR Analysis. *Russian Energy Policy and Strategy* 1(2): 9–21.
- Liuhto, K. 2010.** Energy in Russia's Foreign Policy. *Electronic Publications of Pan-European Institute* 10.
- Manenok, T. 2010.** *Belarus-Russia: Dependency or Addiction?* Warsaw: Heinrich Böll Stiftung. URL: <http://www.pl.boell.org/web/104-789.html>.
- Monaghan, A. 2007.** Russia's Energy Diplomacy: A Political Idea Lacking a Strategy? *Southeast European and Black Sea Studies* 7(2): 275–288.

- Nygren, B. 2008.** *The Rebuilding of Greater Russia: Putin's Foreign Policy towards the CIS Countries*. London – New York: Routledge.
- Obydenkova, A. 2011.** Comparative Regionalism: Eurasian Cooperation and European Integration. The Case for Neofunctionalism. *Journal of Eurasian Studies* 2: 87–102.
- Olearchyk, R. 2011.** Moscow Lures Ukraine with Cheap Gas. *Kyiv Post* 7 April. URL: <http://www.kyivpost.com/news/ukraine/detail/101820/>.
- Petro, N. N. 2011.** Russian Foreign Policy, 2000–2011: From Nation-State to Global Risk Sharing. PECOB's Paper Series 12. June. Bologna: Portal on Central Eastern and Balkan Europe.
- PONTIS Foundation 2007.** Belarus and Russia: Friends Forever...? Center for Political Education. URL: <http://pdc.ceu.hu/archive/00003083/>.
- Popovici, V. 2009.** Black Sea Region Stands at Energy Crossroads. *Oil and Gas Journal* 107(45): 56–60.
- Roberts, J. 2007.** Energy Cooperation among the BSEC Member States – Towards an Energy Strategy for the BSEC. ICBSS. Athens, October.
- Sakwa, R. 2008.** *Russian Politics and Society*. London – New York: Routledge.
- Saunders, P. J. 2008.** *Russian Energy and European Security: A Transatlantic Dialogue*. Washington, D.C.: The Nixon Centre.
- Shadikhodjaev, S. 2009.** Trade Integration in the CIS Region: A Thorny Path towards a Customs Union. *Journal of Economic Law* 12(3): 555–578.
- Shadrina, E. 2010.** Russia's Foreign Energy Policy: Norms, Ideas and Driving Dynamics. *Electronic Publications of Pan-European Institute* 18.
- Smith, K. C. 2008.** Russian Energy Policy and Its Challenge to Western Policy Makers. *CSIS Commentary*. March. URL: <http://csis.org/publication/russian-energy-policy-and-its-challenge-western-policy-makers>.
- Tekin, A., and Walterova, I. 2007.** Turkey's Geopolitical Role: The Energy Angle. *Middle East Policy* XIV(1): 84–94.
- Trenin, D. 2008.** Energy Geopolitics in Russia-EU Relations. In Barysch, K. (Ed.), *Pipelines, Politics and Power, the Future of EU-Russia Energy Relations* (pp. 15–24). London: Centre for European Reform.
- Turkish Ministry of Foreign Affairs 2009.** Turkey's Energy Security Strategy. URL: [http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy.%20Strategy%20\(Ocak%202009\).pdf](http://www.mfa.gov.tr/data/DISPOLITIKA/EnerjiPolitikasi/Turkey's%20Energy.%20Strategy%20(Ocak%202009).pdf).
- UPI 2012.** Russia to Double Azerbaijan Gas Imports. 25 January. URL: http://www.upi.com/Business_News/Energy-Resources/2012/01/25/Russia-to-double-Azerbaijan-gas-imports/UPI-40841327491000/.
- Varol Sevim, T. 2011.** Turkey's Energy Strategy and Latest Developments in the Context of the '4 Sisters' Pipeline Projects. *WISC* August.
- Vinokurov, E. 2010.** *The Evolution of Kazakhstan's Position on Relations with Russia in 1991–2010*. MPRA Paper No. 22187. March. URL: <http://mpira.ub.uni-muenchen.de/22187>.
- Weitz, R. 2008.** *Kazakhstan and the New International Politics of Eurasia*. Silk Road Paper. July. Washington, DC: Central Asia-Caucasus Institute & Silk Road Studies Program.
- Woehrel, S. 2009.** Russian Energy Policy toward Neighboring Countries. CRS. RL34261, September 2. Washington, D.C.: Congressional Research Service.

- Wood, T. 2008.** *Failed Multilateralism or Emerging Bilateralism in Central Asia?* Panel paper presented at the International Studies Association (ISA) Annual Conference, San Francisco, March 2008.
- Yafimava, K. 2010.** *The June 2010 Russian-Belarusian Gas Transit Dispute: A Surprise That Was to Be Expected.* NG43. Oxford: The Oxford Institute for Energy Studies.
- Yafimava, K., and Stern, J. 2007.** *The 2007 Russia-Belarus Gas Agreement.* Oxford: Oxford Energy Institute for Energy Studies.
- Zaitseva, M. N. 2005.** *The Perils of Dependency: An Examination of Russia's Use of Energy Leverage with Selected Former Soviet States.* International Studies Association Annual Meeting. Hawaii. March.

Ageing and Globalization: A Global Analysis*

Jason L. Powell and Hafiz T. A. Khan

As we look forward into the mid-twenty-first century, the demographers forecast dramatic increases in cultural diversity in the general population of the globe, which will also be reflected in increasing ageing populations. Globalization is a complex phenomenon which includes increasing human interconnectedness facilitated by new information technologies and huge volumes of trade, capital, people, and cultures flowing across national borders, and an evermore integrated global economy. Globalization can be experienced as structural forces impinging on our daily lives, as the creation of new spaces and interconnection between locales and also as ideological resources (Chen and Powell 2012). A key issue is the relationship between globalization and population ageing which has possibilities and consequences for social change across the globe.

Keywords: *population ageing, globalization, economic crisis, health.*

Introduction

Population ageing is considered to be an important aspect in this age of globalization as it has huge impacts on diverse areas of our daily life. Past literature has highlighted the impact of ageing on various levels at societal and economic of a country, however, little is known about the interconnectedness between the ageing and globalization. This paper therefore aims at providing an exploratory investigation on the linkages between globalization and ageing of population across the world.

Discussion on Ageing and Globalization

While the highest proportions of older people are currently found in more developed countries, the most rapid growth of this age group is actually occurring in the less developed world (McDaniel and Zimmer 2013). Between 2006 and 2030, the increasing number of older people in less developed countries is projected to grow by 140 per cent as compared to an increase of 51 per cent in more developed countries (Krug 2002). A key feature of population ageing is the progressive ageing of the older population itself. Over time, more older people survive to even more advanced ages (Chen and Powell 2012). The forecast rise in the number of older people aged 75+ over the next two decades will lead to an expansion of demand for health, housing accommodation and pensions for ageing populations and is thus of crucial importance for governments, policy makers, planners, and researchers in all nation states (McDaniel and Zimmer 2013). On a global scale, the population aged 85 and over is projected to increase by 151 per cent between 2005 and 2030,

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compared to a 104 per cent increase for the population aged 65 and over and a 21 per cent increase for the population under 65 (Bengston and Lowenstein 2004). The most striking increase will occur in Japan: by 2030, nearly 24 per cent of all older Japanese are expected to be at least 85 years old. As life expectancy increases and people aged 85 and over increase in number, four-generation families may become more common (Chen and Powell 2012).

In advanced capitalist or First World countries fertility decline that started in the early 1900s have resulted in current fertility levels below the population replacement rate of two live births per woman. Perhaps, the most surprising demographic development of the past two decades has been the pace of fertility decline in many less developed countries (Giddens 1993). In 2006, for example, the total fertility rate (TFR) was at or below the replacement rate in 44 less developed countries (Cook and Powell 2007). Most of the more developed nations have had decades to adjust to this change in age structure. For example, it took more than a century for France's population aged 65 and over to increase from 7 per cent to 14 per cent of the total population. In contrast, many less developed or Third World countries are experiencing rapid increases in the number and percentage of older people, often within a single generation. The same demographic ageing process that unfolded over more than a century in France will occur in two decades in Brazil (OECD 2007). In response to this compression of ageing, institutions must adapt quickly to accommodate a new age structure. Some less developed nations will be forced to confront issues, such as social support and the allocation of resources across generations, without accompanying economic growth that characterized the experience of ageing societies in the West. In other words, some countries 'may grow old before they grow rich' (Cook and Powell 2010: 77).

Globalization has also produced a distinctive stage in the social history of population ageing, with a growing tension between nation state-based solutions (and anxieties) about growing old and those formulated by global institutions (Heshmati and Lee 2010). Globalization, defined here as the process, whereby nation-states are influenced (and sometimes undermined) by transnational actors (Powell 2005), has become an influential force in shaping responses to population ageing. Growing old has itself become relocated within a transnational context with international organizations (such as the World Bank and International Monetary Fund) and cross-border migrations, creating new conditions and environments for older people (Phillipson 2003).

Ageing can no longer be viewed just as a 'national' problem but the one that affects transnational agencies and communities. Local or national interpretations of ageing had some meaning in the world where states were in control of their own destiny (Estes *et al.* 2003). They also carried force where social policies were being designed with the aim or aspiration of levelling inequalities, and where citizenship was still largely a national affair (and where there was some degree of confidence over what constituted 'national borders'). The crisis affecting each of these areas, largely set in motion by different aspects of globalization, is now posing acute challenges for understanding 'global ageing' in the twenty-first century.

If these examples illustrate the complexity and impact of global ageing – then, it may be pertinent to highlight how globalization is impacting more specifically across different continents around the world.

Since the turn of the last century, the life expectancy of people born in North America has increased by approximately 25 years and the proportion of persons 65 years or older

has increased from 4 per cent to over 13 per cent (Estes and Associates 2001). By 2030, one in five individuals in the USA is expected to be 65 years or older and people aged 85 and older make up the fastest growing segment of the population. In 2000, there were 34 million people aged 65 or older in the United States that represented 13 per cent of the overall population (Estes and Associates 2001). By 2030, there will be 70 million people over 65 in the United States, more than twice their number in 2000. 31 million people, or 12 per cent of the total population, are aged 65 and older. In another 35 years, the elderly population should double again. The ageing population is not only growing rapidly, but it is also getting older:

In 1990, less than one in ten elderly persons was age 85 or older. By 2045, the oldest old will be one in five. Increasing longevity and the steady movement of baby boomers into the oldest age group will drive this trend (Longino 1994: 856).

The percentage of the oldest old will vary considerably from country to country. In the United States, for example, the oldest old accounted for 14 per cent of all older people in 2005. By 2030, this percentage is unlikely to change because the ageing baby boom generation will continue to enter the ranks of the 65-and-over population (Bengston and Lowenstein 2004). This is obviously causing much concern among policy-makers but Longino (1994), for instance, believes that thanks to better health care service, changing living arrangements and improved assistive devices, the future may not be as negative as we think when we consider an ageing population. Ageing is, therefore, seen as a triumph of the twenty-first century (UNFPA 2012).

Estimates suggest that there is an increasing trend of share portion of older people (60+ years) globally (UNFPA 2012; McDaniel and Zimmer 2013) and a significant variation exists between developed and developing countries in terms of responding policy actions to emerging issues particularly in bearing the cost of care for the elderly persons (Khan *et al.* 2013). In many countries of the world the progress of solving global ageing issues has become slower or somehow impossible due to the 2008–2012 global financial crises. Recent study shows that the global economic crisis has exacerbated the financial pressure in every country to ensure both the economic security and the access to health care in old age (UNFPA 2012).

It will be different, however, not least because people currently divorced constitute a small proportion of older populations. This will soon change in many countries as younger populations with higher divorce and separation rates age. In the United States, for example, nine per cent of the 65-and-over population is divorced or separated compared to 17 per cent of people aged 55 to 64 and 18 per cent of people aged 45 to 54 (Manton and Gu 2001). This trend has gender-specific implications: in all probability non-married women are less likely than non-married men to have accumulated assets and pension wealth for use in older age, while older men are less likely to form and maintain supportive social networks.

Shoring up public pensions is hardly the only path the nations of North and South America are exploring. In many countries, privately managed saving accounts have been strongly advocated (Estes and Associates 2001). Two decades ago, nearly every South American nation had pay-as-you-go systems similar to the U.S. Social Security system. Some granted civil servants retiring in their 50s full salaries for life. Widening budget deficits changed that. In 1981, Chile replaced its public system with retirement accounts funded by worker contributions and managed by private firms. The World Bank encouraged 11 other Latin nations to introduce similar features. For example, in Chile the gov-

ernment addressed its fiscal budget deficit by mobilizing \$49 billion of pension-fund assets that make it easier for companies and corporations to fund investments in the local currency with bond offerings, and most workers have some retirement benefits from this (OECD 2007). At the same time, the downside has been those people who cannot afford a private pension and have been left to a low state pension which has intensified poverty (Estes and Associates 2001); an enduring feature of all nation states in America. For the future, there is no safety guarantee that private pension schemes are protected and pay out for people who invest their savings in such provision. In the deregulated U.S. pension system, the issue of corporate crime has highlighted the continuing problem of private pension provision. For example, it can be clearly seen with the energy corporation of Enron's embezzlement of billions of dollars of employees private pension schemes (Powell 2005). This debate amounts to a significant global discourse about pension provision and retirement ages, but one which has largely excluded perspectives which might suggest an enlarged role for the state, and those which might question the stability and cost effectiveness of private schemes. The International Labour Organization (ILO) concluded that investing in financial markets is an uncertain and volatile business: that under present pension plans people may save up to 30 per cent more than they need, which would reduce their spending during their working life; or they may save 30 per cent too little – which would severely cut their spending in retirement (Phillipson 1998; Estes *et al.* 2003).

Holtzman (1997), in a paper outlining a World Bank perspective on pension reform, has argued for reducing state pay-as-you-go (PAYG) schemes to a minimal role of basic pension provision. This position has influenced both national governments and transnational bodies, such as the International Labour Organization (ILO), with the latter now conceding to the World Bank's position with their advocacy of a mean-tested first pension, the promotion of an extended role for individualized and capitalized private pensions, and the call for Organization for Economic Cooperation and Development (OECD) member countries to raise the age of retirement.

There is also the impact of intergovernmental organizations (IGOs) on the pension debate in South America. Such arguments are to create a climate of fear, inevitability and scientific certainty that public pension provision will fail. In so far as this strategy succeeds, it creates a self-fulfilling prophecy. If people believe the 'experts' who say publicly sponsored PAYG systems cannot be sustained, they are more likely to act in ways that mean they are unsustainable in practice. Certainly, in Europe and elsewhere, the state pension is an extremely popular institution. To have it removed or curtailed creates massive opposition. Only by demoralizing the population with the belief that it is demographically unsustainable has room for the private financiers been created and a mass pensions market formed.

Increasingly, the social infrastructure of welfare states is being targeted as a major area of opportunity for global investors. The World Bank has expressed the belief that the public sector is less efficient in managing new infrastructure activities and that the time has come for private actors to provide what were once assumed to be public services. This view has been strongly endorsed by a variety of multinational companies, especially in their work with the World Trade Organisation (WTO). The WTO enforces more than twenty separate international agreements, using international trade tribunals that adjudicate disputes. Such agreements include the General Agreement on Trade in Services (GATS), the first multilateral legally enforceable agreement covering banking, insurance, financial services and related areas (Estes *et al.* 2003).

Asia has the fastest increase in the ageing population in the world. Kim and Lee (2007) claim the growing elderly population is beginning to exert pressure on the East Asian countries' economies. Three decades ago, major industrialized countries have begun to grapple with the similar problem. With increasing drop in fertility rates, more East Asian economies such as Japan, Hong Kong, South Korea, Singapore and Taiwan are expected to turn into 'super-ageing societies' by 2025 (Kim and Lee 2007). However, the magnitude of the future impact depends on the (in)ability of individual economies to resolve the demographic changes problem through increased privatization, pension reforms, migration to more productive countries and extension of retirement age. Like western countries, Asia will ultimately have to tackle issues related to pension reform and the provision of long term health care services (Cook and Powell 2010).

For Japan, the basic statistical reality of its demographic profile is escalating. Already 17 of every 100 of its people are over 65, and this ratio will approach 30 in 15 years. From 2005 to 2012, Japan's workforce is projected to shrink by around a per cent every year – a pace that will accelerate after that. Economists fear that, besides blowing an even bigger hole in Japan's underfunded pension system (Cook and Powell 2010), the decline of workers and young families will make it harder for Japan to generate new wealth.

The future challenge of providing for the elderly is especially urgent in the world's two biggest nations – India and China. Only 11 per cent of Indians have pensions, and they tend to be civil servants and the affluent. With a young population and relatively big families, many of the elderly population still count on their children for support. This is not the case in China. By 2030, there will be only two working-age people to support every retiree. Yet only 20 per cent of workers have government- or company-funded pensions or medical coverage (Chen and Powell 2012). However, as a counterbalance to such a gloomy perspective, 'Chindia' (China and India taken together) is currently accumulating vast wealth as a result of globalization, wealth that could potentially be redirected for the support of their elderly populations.

The population structure of Western European countries has changed since the turn of the twentieth century. Whereas in 1901, just over six per cent of the population were at or over current pension age (65 in the UK for men and women), this figure rose steadily to reach 18 per cent in 2001 (Powell 2005). At the same time, the population of younger people under age 16 fell from 35 per cent to 20 per cent. As European countries reach a relatively high level of population ageing, the proportion of workers tends to decline. European countries, including France, Germany, Greece, Italy, Russia, and the Ukraine, already have seen an absolute decline in the size of their workforce. And in countries where tax increases are needed to pay for transfers to growing older populations, the tax burden may discourage future workforce participation. The impact on the Nation States' gross domestic product will depend on increases in labor productivity and that State's ability to substitute capital for labor. Less developed countries can shift their economies from labor-intensive to capital-intensive sectors as population ageing advances. Options for more European nation states may be more constrained. The 'rolling back' of pensions promises is just one symptom of a shift in European history: the 'graying of the baby-boom generation' (Chen and Powell 2012). The percentage of 60-year-olds and older are growing 1.9 per cent a year. This is 60 per cent faster than the overall global population. In 1950 there were 12 people aged 15 to 64 to support each one of retirement age. Currently, the global average is nine. It will be only four-to-one by 2050 (McDaniel and Zimmer 2013). By then, the numbers of

older people will outnumber children for the first time. Some economists fear this will lead to bankrupt pensions and lower living standards. It is interesting that in Germany this fear is becoming a battleground for political electioneering. For example, Germany has the highest population in Europe and the third oldest population in the world, which presents both critical questions on public finances to provide pensions and healthcare and an opportunity for innovations in the marketplace. Currently, ageing has started to figure prominently in political discussions prior to 2009 elections, as political parties vie for the elderly vote. The current Merkel administration has been criticized for increasing pensions while opponents talk about a 'war of generations' requiring young people to pay for taxation for elder care.

The trend has drawn further attention across Europe, where the working-age population declined by 0.6 per cent in 2010. By 2025, the number of people aged 15 to 64 is projected to dwindle by 10.4 per cent in Spain, 10.7 per cent in Germany and 14.8 per cent in Italy. But ageing is just as dramatic in such emerging markets as China – which is expected to have 265 million 65-year-olds by 2020 – and Russia and the Ukraine (Cook and Powell 2007).

Using evidence from the UK, the percentage of people of working age, that is 16–64, will drop from 64 per cent in 1994 to 58 per cent in 2031 (Powell 2005). As the number of workers per pensioner decreases there will be pressure on pension provision. This is evident now, in such areas of pensions and long term care, the retreat of the state made evident in the erosion of State Earnings Related Pensions Scheme are forcing people to devise their own strategies for economic survival in old age (Phillipson 1998). In the British context that also impinges on global societies in general, private pensions are slowly being introduced in order to prevent the 'burden' of an ageing population. These are ways in which the State continues to rely on apocalyptic projections such as 'demographic time bomb' about ageing populations in order to justify cuts in public expenditure (Powell 2005). Hence, the population of Great Britain, like that of other European countries, is ageing rapidly. There are only enough young people to fill one in three of the new and replacement jobs that will need to be taken up over the next decade. Older people take much of the responsibility for our social and civic life and for the care of children, the sick and the very old in the community. Yet, the gap between wealth and poverty, choice and the absence of choice for older people is stark and growing wider (Phillipson 1998). The UK government is at the time of writing seeking to promote a debate over what they envisage as a multi-billion pound deficit that will be found in care for the elderly in future.

Economic security, health and disability, and living conditions in old age are policy concerns throughout the world, but the nature of the problem differs considerably from continent to continent and between and within countries – especially within Africa.

In Africa older people make up a relatively small fraction of the total population, and traditionally their main source of support has been the household and family, supplemented in many cases by other informal mechanisms, such as kinship networks and mutual aid societies. In 2005, Nigeria ranked among the top 30 countries in the world on the basis of the size of its population aged 60 and over. Nigeria had the largest older population in sub-Saharan Africa, with over 6 million people of age 60 and over; South Africa had just over 3.4 million. Congo and South Africa are projected to have nearly 5 million older people in 2030. Burkina Faso, Cameroon, Cote d'Ivoire, Madagascar, Mozambique, Niger, Senegal, and Uganda are all projected to have their older populations grow to over

one million people by 2030 (HIV/AIDS Alliance and HelpAge International 2004). Very little careful empirical research has been undertaken on long-term trends in the welfare of older people, but there are a number of reasons to believe that traditional caring and social support mechanisms in Africa are under increasing strain (OECD 2007).

Located on the least developed and poorest continent, according to the World Bank report, the average per capita income for 25 sub-Saharan African countries was only 130 (GDP per capita in current US\$), this increased to US\$ 1315 by 2011. In addition, reductions in fertility and child mortality have meant that, despite the huge impact of the HIV/AIDS epidemic across much of the region, both the absolute size and the proportion of the population of age 60 and over have grown and will continue to grow over the next 30 years (Estes *et al.* 2003).

In Africa, as in other traditional societies such as those in India or China, older people have traditionally been viewed in a positive light, as repositories of information and wisdom. And while African families are generally still intact, development and modernization are closely connected with social and economic changes that can weaken traditional social values and networks that provide care and support in later life. Africa has long carried a high burden of disease, including malaria and tuberculosis; today it is home for more than 60 per cent of all people living with HIV – some 25.8 million in 2005. The vast majority of those affected are still in their prime wage-earning years, at an age when, normally, they would be expected to be the main wage earners and principal sources of financial and material support for older people and children in their families. Many older people have had to deal with the loss of their own support while absorbing the additional responsibilities of caring for their orphaned grandchildren. Increasingly, then, it appears that African societies are being asked to cope with population ageing with neither a comprehensive formal social security system nor a well-functioning traditional care system in place (HIV/AIDS Alliance and HelpAge International 2004).

According to the 2010 UN database, the big issue is that the majority of the world's population of older people aged 60 years and over (461 million) live in Asian countries out of world's total 865 million. There is also a remarkable difference between geographical locations. For example, in 2012, only 6 per cent of the population in Africa was 60 years and over, compared with 11 per cent in Asia, and 22 per cent in Europe. By 2050, it is expected that ten per cent of the population in Africa will be 60+ years, compared with 24 per cent in Asia and 34 per cent in Europe (UNFPA 2012). For many countries, however, population ageing has been accompanied by reductions in per capita income and living standards decline. Epstein (2001) notes that between 1950 and the late 1970s, life expectancy increased by at least 10 per cent in every developing country of the world, or on average by about 15 years. Life expectancy is generally accelerating with the passage of time and varies largely across geographical regions (UNFPA 2012). However, at the beginning of the twenty-first century, life expectancy remains under fifty years in more than *twenty* developing countries, and in those countries since 1970 life expectancy has actually fallen (*e.g.*, Uganda, Zambia, Zimbabwe, Botswana, Lesotho, and Swaziland), or has barely risen (*e.g.*, Burundi, Malawi, Mozambique, Rwanda, Nigeria, Mali, Chad and Somalia) (UN 2013).

The AIDS epidemic is certainly a major factor here, but development loans requiring the privatization of health care have also had an impact. Epstein (2001) reports, for

example, that by the mid-1990s the African continent was transferring four times more in debt repayment than on health or education. More generally, HelpAge International argues that:

Older people's poverty is still not a core concern in the social, economic and ethical debates of our time. Their right to development is routinely denied, with ageing seen as a minority interest or case for special pleading. Poverty and social exclusion remain the main stumbling blocks to the realisation of the human rights of older people worldwide (HelpAge International 2000: 8).

Conclusions

The globalization of ageing will have dramatic effects on local, regional, and global economies (Powell and Chen 2012). Most significantly, financial expenditures, labor supply, and total savings will be affected. Changes in the age structures of societies also affect total levels of labor force participation in society, because the likelihood that an individual will be in the labor force varies systematically by age. Concurrently, global population ageing is projected to lead to lower proportions of the population in the labor force in highly industrialized nations, threatening both productivity and the ability to support an ageing population. At the same time, as age structural transition takes place quite rapidly, globally there are concerns regarding the actual capacities of societies to address the challenges of ageing population, particularly during the global economic crisis. The first thing would be to understand the extent of ageing issues with each society and to take steps to remedy the problems. For that we need real data on elderly people and their families. Countries need strong political commitments as to how they can utilize the resources for wellbeing of elderly by providing social pension or restructuring workforces in order to accommodate older persons at workplace or enhancing social care by encouraging intergenerational relationships within societies and communities (Khan *et al.* 2013). People should be encouraged for taking part in voluntary activities within the community at large. Mass campaign is necessary in order to educate the society that older person is not a burden instead they are contributing more to the family as well as to the society. We should highlight positive news on older people. At the same time, 'young old' should be prepared for the life-long saving as the future benefit system is likely to be uncertain.

References

- Bengston, V. L., and Lowenstein, A. 2004. (Eds.) *Global Aging and Challenges to Families*. New York: Aldine De Gruyter.
- Chen, S., and Powell, J. L. 2012. *Aging in China*. New York: Springer.
- Cook, I. G., and Powell, J. L. 2007. *New Perspectives on China and Ageing*. New York: Nova Science Publishers, Inc.
- Cook, I. G., and Powell, J. L. 2010. *Aging in Asia*. New York: Nova Science Publishers, Inc.
- Epstein, H. 2001. Time of Indifference. *New York Review of Books*, April 12: 33–38.
- Estes, C. L., and Associates 2001. *Social Policy and Ageing*. Sage: Thousand Oaks.
- Estes, C. L., Biggs, S., and Phillipson, C. 2003. *Social Theory, Social Policy and Ageing*. Maidenhead: Open University Press.
- Giddens, A. 1993. *Sociology*. Cambridge: Polity Press.

- HelpAge International. 2000.** *The Mark of a Noble Society*. London: HelpAge International.
- Heshmati, A., and Lee, S. 2010.** The Relationship between Globalization, Economic Growth and Income Inequality. *Journal of Globalization Studies* 1(2): 87–117.
- HIV/AIDS Alliance and HelpAge International. 2004.** *Building Blocks: Africa-wide Briefing Notes: Supporting Older Carers*. Brighton: HIV/AIDS Alliance and HelpAge International.
- Holtzman, R. A. 1997.** *A World Bank Perspective on Pension Reform*. Paper prepared for the joint ILO-OECD Workshop on the Development and Reform of Pension Schemes. December. Paris.
- Khan, H. T. A., Leeson, G. L., and Findlay, H. 2013.** Attitudes towards Bearing the Cost of Care in Later Life across the World. *Illness, Crisis and Loss* 21(1): 49–69.
- Kim, S., and Lee, J.-W. 2007.** Demographic Changes, Saving and Current Account in East Asia. *Asian Economic Papers* 6(2): 22–53.
- Krug, E. G. 2002.** *World Report on Violence and Health*. Geneva: World Health Organisation.
- Longino, C. F. 1994.** Pressure from Our Aging Population will Broaden Our Understanding of Medicine. *Academic Medicine* 72(10): 841–847.
- McDaniel, S. A., and Zimmer, Z. 2013. (Eds.)** *Global Ageing in the Twenty-First Century: Challenges, Opportunities and Implications*. Surrey: Ashgate.
- Manton, K. G., and Gu, X. 2001.** Changes in the Prevalence of Chronic Disability in the United States Black and Nonblack Population Above Age 65 from 1982 to 1999. *Proceedings of the National Academy of Sciences of the United States of America* 98(11): 6354–6359.
- OECD. 2007.** *Disability Trends among Elderly People: Re-Assessing the Evidence in 12 OECD Countries*. Paris: OECD.
- Phillipson, C. 1998.** *Reconstructing Old Age*. London: Sage.
- Powell, J. L. 2005.** *Rethinking Social Theory and Later Life*. New York: Nova Science.
- Powell, J. L., and Chen, S. 2012.** *The Global Dynamics of Ageing*. New York: Nova Science.
- UNFPA. 2012.** *Ageing in the Twenty-First Century: A Celebration and a Challenge*. New York: United Nations.

The Main Trends of the Global Dynamics and the Future of the World Development*

Valentina M. Bondarenko

The article elaborates the author's ideas on the two paradigms of the human system development formulated in her previous works (Bondarenko 2011, 2012). The first development paradigm is expressed in the direct connection between production and consumption. The essence of the second development paradigm is seen in the indirect and desynchronized (both in space and time) interconnection of different commodity production technologies and consumption of such commodities by a specific human individual. The new (third) model of life organization is at the same time the first development paradigm based on the direct interconnection between production and consumption of specific human beings, but raised onto the new high-tech level. Practical realization of this model is the only feasible precondition for the transition to sustainable and crisis-free development. Cycles, crises, chaos and all negative phenomena are nothing else but natural products of the second, indirect paradigm of development.

Keywords: systemic crisis, sustainable development, new methodology of cognition, objective, specific human being, time, efficiency criteria, two development paradigms, coordination of interests, new model of life organization.

Introduction

The global systemic crisis, hitting all facets of the human community's life, is becoming more and more profound and wider in scope. This fact has been recognized at all summits of G20 (including the latest in Mexico), summits of G8, as well as the latest economic forums in Davos and Saint-Petersburg. The panic in the world markets (including the market of raw materials) has been generated by publication of negative data on almost all major economies of the world (*i.e.*, US, Europe, China and India).

China's economy demonstrates slower growth rates, too. Investors and economists once again started to talk about the threat of China's 'hard landing' and to call for resolute measures that would stimulate economic growth. But, as experts in China's economy suggest, in order to become 'an engine of global economy', the Celestial Empire first needs to make its people wealthy. However, in this case China would lose its main advantage, that is, its cheap labor.

India, with its second largest population in the world, that has become the world's tenth largest economy by staking on development of the innovation sector, also has faced the crisis situation. Its GDP growth rates fell down sharply, while the rupee exchange rate against the USD dropped to historical minimum. Meanwhile, according to some expert

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assessments, the crisis in India can catalyze new recession in the entire world. Corruption, inflation, expensive credit and political paralysis result in the outflow of capital and termination of business projects. In particular, this applies to strategic sectors, where the state actively regulates the process, while in the less regulated spheres (e.g., IT and pharmacology) the situation is more favorable. In this sense India differs strongly from China, where exactly the sectors with strong presence of the state and use of cheap labor drive the progress of national economy.

Many economists hold the view that all the current developments in the world provide ample evidence of the already surged second wave of the crisis. However, the monetary means (also used before) such as printing money and its investment in all sorts of assets (shares, raw resources, or real-estate property) are prevailing over investments in the fixed capital, and this latter circumstance will result in the further slow-down of growth. This means that the old patterns designed to cope with crisis by monetary injections into economy no longer work, and hence this mode is not an anti-crisis remedy that would eliminate the prime cause of the crisis either. Moreover, on the one hand, it is recognized that at present there is no serious discussion on how to cope with the crisis. On the other hand, since the latest World Economic Forum in Davos we hear the ever more loudly voiced arguments that the crisis of 2008 and its current second wave signify the crisis of the contemporary economic model. In such circumstances, unless the root-cause of the economic crisis is identified, any system of institutes and mechanisms designed to eliminate tensions in the course of anti-crisis measures would be inefficient, to say the least.

In his introduction to Grzegorz W. Kolodko's book *Globalization, Transformation, Crisis – What's Next?*, Prof. Rouslan Grinberg notes: 'Economics and sociology arrived to one shared conclusion: organization and functioning of the surrounding world is the ever less comprehensible, as it becomes the ever more illogical and hence uncertain' (Grinberg 2011: 9).

Therefore, the main precondition to proceed to crisis-free development is to receive and master knowledge on objective causes of the global crisis, to find ways to the crisis-free development and to understand the implications of each decision made. The time for development by the trial-and-error method has already passed.

New Methodology for Cognition of Regularities in the Human System Development

Elsewhere (Bondarenko 2011, 2012) we have presented the new methodology of comprehension of the regularities in the human system development that we have formulated in the recent thirty years. We have also been conducting a research aimed at identification of objective causes for the crisis condition in the human system development as well as at visualization of the future. As a result, our new methodology was worked out.

In the present paper we find it appropriate to repeat some ideas of our methodological pattern and elaborate them with some new speculations. The essence of the new methodological tool-kit and its scientific novelty are represented by the fact that it is based on the discovered objective target in the human community development. In order to arrive at this conclusion, it was required not only to define the goal of the human system development, but to identify the final objective that cannot be a sub-goal of a higher objective within the mundane human existence, but represents the objective reason of the human system development – and then to understand that each particular person, each individual lives not to

provide GDP growth or to manufacture the maximal possible amount of weapons for self-annihilation. A human individual must and can live in order to develop and realize maximally his/her spiritual and intellectual potential while at the same time raising the level of consciousness and physical perfection.

In other words, each specific human individual in his/her development must and can attain the Supreme Reason or to reach the image and liking of the Creator. Otherwise, development would follow a different, entirely opposite scenario – *i.e.*, the blind-alley option: retrograde development for the purpose of starting everything anew, or a catastrophic finish, the apocalypse. Even now some technologies have been created that can very well work without human interference. For example, the IBM Corporation is working on the Smart City project providing interaction of municipal intellectual systems without involvement of human mind.

The modern bio-computers can force human cells to communicate independently with one another so that this would pave the way to construction of their complex configurations. Hence, to overcome and eliminate crises and all problems facing the government, business and society at large would be only possible if all decisions in the end provide continuous, evolutionary and irreversible movement towards attainment of development objective. Only in such a case it will be possible to find a way for sustainable development and practical realization of the 'Millennium Development Goals' (by our logic – the sub-goals of the higher objective), announced by the UN as the guiding landmarks for all nations of the Earth.

Held in Rio-de-Janeiro in 1992, the UN Conference on Environment and Development formulated the major ideas on sustainable development of the humankind. The sustainable development concept fundamentally differed from traditional views and economic practices in the sense that it contained an integral approach to development as an overall process. At that time the sustainable development was defined schematically as a 'triune' interaction process of 'nature – population – economy'. However, for this classical triad to be viable, its emphases must be modified in the context of our visionary approach as 'goal – sustainable – development'. The sustainable and steadfast movement ahead, *i.e.*, development must and can be only provided in relation to nothing else but the objectively set goal.

Therefore, whether we like it or not, the society should develop so that to create for any human individual the area of habitation, in which equal and free access to all diversified benefits of civilization would be available – not in order to reach a new level of 'consumerism' or supremacy of technologies over humans, but in order to attain the final objective – let humans become perfect. This is the human being's mission on the Earth, and it must be fulfilled!

The second component of the new methodological toolkit – integrity, systemic nature and cross-disciplinary approach – proceeds from the basis that the world is single, the laws of nature and society are in unity, while the world is an integral system and can be cognized only with unification of all scientific and spiritual knowledge into some unified, systemic, integral and cross-disciplinary (or, rather, trans-disciplinary) knowledge. Therefore all these elements had to be unified systemically through identification of the target function of development of the entire system and its any part in any section (civilization-related, formational, national, confessional, territorial, natural-scientific, socio-economic, socio-cultural, political, organizational, *etc.*), and irrespectively of whatever development

model (neo-Liberal, Keynesian, totalitarian, or a mixture thereof) would be prevailing. Only through such knowledge one would understand that the financial, economic, social, organizational, science-tech and, as a whole, systemic crisis in the world as well as all existing negative phenomena are links of the same chain. Therefore the decision, too, must be integral, systemic and unified for the entire world, but the interests of all people living on the planet must be taken into account.

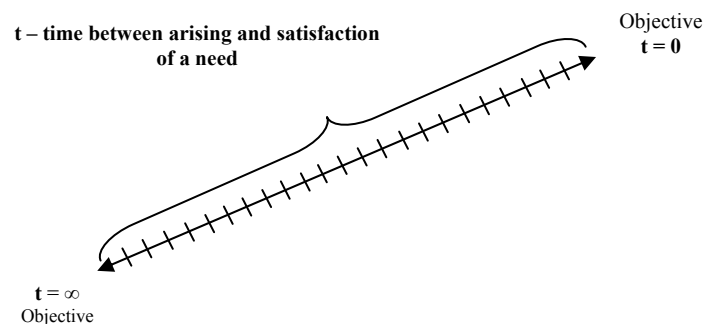
Third, we identified the only possible index to measure and juxtapose all processes and phenomena – that is time. By applying the latter, we can measure and juxtapose in other indices something immeasurable or incomparable, and, what is the most important, to correlate all facets of human and societal life with the target ideal, and to find out as at what step of human progress they are located in relation to the objective.

Fourth and finally, the new methodological toolkit contains the single criteria of efficiency of the human system development – the time between the need to approach realization of the single objective of development and the reality, in which society (in whatever the section) and each specific individual are placed in relation to such objective. If *the time between* arising and satisfaction of a specific individual's need tends to reduce continuously and evolutionally, as well as gravitates to zero, then the human system develops in relation to the objective sustainably and efficiently. This conclusion provides us with the absolutely new understanding of the human system development. Application of this criteria helps to control time between arising and satisfaction of any need of any specific individual. To control time means to control development so that to ensure evolutionary and irreversible reduction and approach the criteria value, equal to zero. Only in this case the human system would start developing sustainably in relation to the objective in the interests of any specific human individual.

The Fundamental Conclusions Obtained by Means of a New Methodology of Knowledge

In the theoretical plane of the new methodology, the time between arising of a need and its satisfaction in terms of the goal attainment is *the vector of time (or axis of time) from infinity to zero* (see Fig. 1).

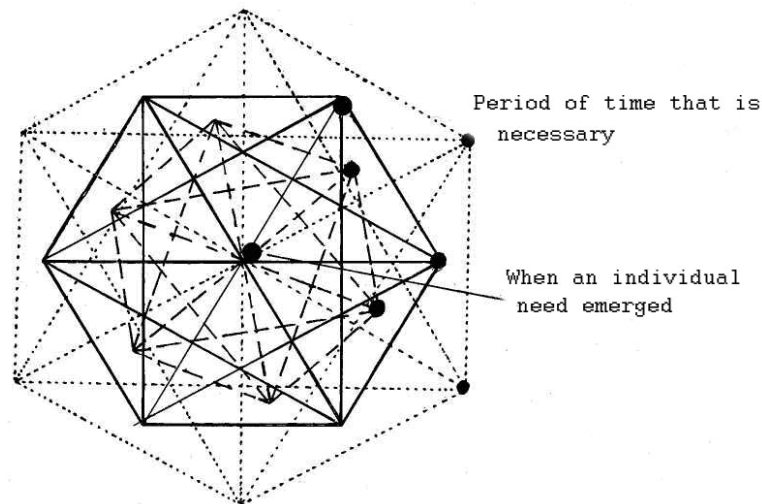
Fig. 1. Vector (Axis) of Time



Development of the humankind and its different structures in whatever the section is distributed along this vector in different points, and at any given moment, the time between arising and satisfaction of a need may decrease or grow, thus approaching or moving away

from the goal. The time vector represents the linear vision of the problem which can be discussed, if the human community's life is considered in statics, as of the given moment of time. In reality, in dynamics, everything takes place in a much more complicated way. Today the time between arising and satisfaction of needs is different for different communities. Moreover, the processes of change in the time can be positive or negative, cyclical and undulated, direct and reverse. If these processes are considered not in relation to communities but to a specific individual, then the numerical value of this diversity would be most probably determined by digital values in multiple degrees. So, every human individual lives in a kind of his/her own sphere, under the effect of his/her own centrifugal and centripetal forces, within some Brownian motion, in his/her own microcosm which does not coincide with the microcosm of others (see Fig. 2). This would produce a peculiar hyper-tetrahedron of the habitation area, and each specific human individual is situated in the center thereof. Vertexes of this hyper-tetrahedron would be equidistant from the center, when the whole humankind happens to be in one and the same space of time, and when the time between arising and satisfaction of a need will be equal for all people. Such outcome can be only attained if equal access to the maximum variety of goods is available.

Fig. 2. Microcosm of Human Individual



So, if civilizations, nations, countries, small and large communities as well as separate individuals stay in different linear and spherical spaces of time, they would have different levels of consciousness and would never be able to conciliate their interests or understand one another. Exactly this circumstance causes origination and aggravation of all troubles of the humankind. Hence, the crisis in development of global civilization, wars, terrorism, man-made and natural disasters are a result of the effect of profound laws common to nature and society. Moreover, as long as people stay in different linear and spherical spaces of time, it will appear that the planet hosts many local civilizations, which are different from one another as they were described in length by Spengler and Huntington.

Therefore to resolve all the implicit problems of society development and to modernize the latter on the basis of R&D and realization of advanced technologies of the twenty-first century would be possible only on condition that the way is found which in the end will provide continuous, evolutionary, irreversible and simultaneous attainment of the ob-

jectively set development goal for each concrete human person with due regard of his/her individual interests.

This methodology and results of its applications are described in detail in the book *Forecasting the Future: A New Paradigm* (Bondarenko 2008) as well as in numerous articles published in Russia and other countries.

As a result, the methodological toolkit made it possible:

- to surpass the limits of the entire human system and to see it as a unified whole of ‘past-present-future’ in relation to the objectively set development goal;
- not to rely upon empirical and subjective data of the past and present;
- to comprehend the objective picture of the human system development depending on the positive (sustainable) or negative (unsustainable) orientation to realization of the unified, single objective.

This methodological toolkit allows us to see that in the whole course of many-centuries-long development of human community, there have been only two paradigms of the human system development:

- a direct connection between production and consumption; and,
- production and consumption are interconnected indirectly.

The schematic outlay of human community development we presented in our other articles on the issue (see Bondarenko 2011, 2012) in which the reader can also find a figure demonstrating when and how each development paradigm was formed, is being formed and can be formed in future along or around the axis of time equal to zero, between the moments of arising and satisfaction of a need.

According to this outlay, the entire history of humankind can be divided into three phases.

Phase 1 is featured by prevalence of the **first development paradigm** expressed in direct connection between production and consumption.

Everything that was produced at that level of manual labor being mastered by humankind was consumed thereby. Hence the time between the arising and satisfaction of a specific individual's need was minimal. That was the pre-industrial type of production – any manufacturer was producing goods for him self and, by order, for specific consumers at the household level (craftsmen).

Advent of primitive technologies, division of labor, market, class of brokers (merchants) and the universal equivalent to exchange with results of such labor – that is, money, as well as the gradual territorial expansion and development of foreign trade – all these resulted in transformation of direct interconnection between production and consumption into indirect one. Thus the **second development paradigm** was taking shape, and its development in time and space was accelerated by transition to the industrial type of development.

The industrial revolution, epochs of steam and railroads, steel, electricity and heavy industry, oil, automobile and mass commodity production entailed building the consumer-communication infrastructure including the network of roads, ports, shops (from small shops to grand shopping centers and highly mechanized warehouses), radio-technical, electric and information networks, *etc.* Those were the major landmarks that evidenced formation of mass conveyer-type industrial production (accompanied by development of domestic and foreign trade as well as territorial expansion up to the global level) and mass consumption. Production of such type is oriented to satisfy demand and needs of an ab-

stract end consumer through the elemental, archaic, mediated by longer time and space, market-based form of communication with any specific human individual.

In such circumstances uncertainty of production resulted in the emergence and in the global growth of disproportion, and then in the entire de-synchronization between the time of production and the time for circulation of goods/money. The dynamics of movement of material and real factors of production, despite their multiply increased volume, has turned to be torn far apart from their monetary form, both the real and (especially) the virtual. Monetary methods of coping with financial crisis made this gap in the movement of real products and money even wider and contributed to the further growth of disproportion between the time for production and time for circulation of commodities and money. As a chain reaction, the financial crisis is growing the ever more rapidly to the level of systemic crisis. Therefore it is clear why philosophers, economists and political scientists, proceeding from the works written on the basis of empirical information about the already happened events of the past, started to argue that complexity, nonlinearity and chaos as well as cycles and crisis are an inevitable condition for development. This would be the case – unless we understand that all the afore-listed phenomena are a natural product of the second paradigm of development.

Appeared in the 1970s, information technologies providing direct communication with consumers, and flexible production systems that can be adapted to specific orders in the real-time regime, did not change the given development paradigm, and did not consolidate the embryonic opportunity to establish direct connection between production and consumption and to conciliate their interests. Information technology became ‘an end in itself’ for development and a means to create global markets.

So, the essence of the second development paradigm is seen in the indirect and desynchronized (both in space and time) interconnection of different commodity production technologies and consumption of such commodities by a specific human individual.

All crisis of this development paradigm occurred at the peak of growing time-related disproportion between the arising and satisfaction of a need. The current systemic crisis is the peak of this development paradigm. Globalization of all relations in its current form, started to negate itself as soon as it appeared.

Why so?

Together with globalization of all processes and the free movement of ideas, goods, money and information, the conveyer-type mass type of production survived and has grown to the global level. Time between arising and satisfaction of an individual's certain need has become even longer. It does not appear possible to conciliate interests of states, society, business and specific individuals. This long road of time and space, available for the afore-mentioned movement, offers perfect conditions for absolutely all negative phenomena. Poverty and inequality, primitive economy, underdeveloped production and trade, terrorism and corruption, natural abnormalities and disasters, growing prices and inflation, *etc.*, – all these are links of one and the same chain, and a product of the indirect development model. In the given case, the factor of time plays an extremely negative role. In such circumstances the scattered and narrowly specialized scientific knowledge undergoes crisis in the solvency of different theories and there explanatory abilities to make a subjective assessment of the occurring events.

However, in the age of cosmic speeds and application of digital, info-, cognitive, nano- and other technologies, we see the onrush change of economic and other realities

that are incompatible with such a type of production and consumption, and, in particular, with such a type of interconnection with a specific individual and impossibility to conciliate specific individuals' interests.

New Model Applied for Life Organization

At the same time, it is only now, owing to development of ICT and other high technologies of the twenty-first century that we again have an opportunity to proceed to the direct connection pattern between production and consumption, that is, to proceed to the first development paradigm once again.

An efficient means to eliminate disproportions and de-synchronization of all processes in time and space can be found provided only that the production-consumption relations are properly synchronized, and interests are agreed with each specific human individual within the whole range of her/his spiritual and material needs, while goods and services that would satisfy the given needs would be produced under the given individual's order, without manufacturing anything redundant. Only such production, oriented to satisfaction of needs of a specific individual under his/her order, would serve the basis for preservation and replenishment of natural ecological life-support systems for the current and future generations.

Return to the first development paradigm would provide resolution of the two interconnected strategic tasks, that is:

(1) to modify the contents of economic and social policy by the state so that it would be aimed at transition to reproduction trajectory of domestic development, provided only that the entire process of reproduction would be oriented to the ultimate result – evolutionary reduction of time between arising and satisfaction of needs (demand) of each specific individual. This can be attained only provided that commodities are produced under the order of any specific individual.

To this end, it appears necessary to draw and realize a program for re-industrialization of the entire production – that is, to put production on the track of advanced engineering and technologies connected with attainments of science-tech progress. The end target is to have smaller high-tech forms of production with distributed systems that can be 're-tuned' in the real-time regime with due regard of a specific individual's order covering the whole range of the customer's needs;

(2) At each local level, to form a mechanism of real-time conciliation of all actors in such relationship – that is, the state, business and end consumers (specific individuals). As a result, only a minimum number of problems that cannot be coordinated at the local level would be presented for conciliation of interests at the regional or national level. Such conciliation must be realized through the shared cross-communication infrastructure, universal for all types of production and all consumers, and based on application of digital information and communication technologies, broad-band television and other innovations that are so widely and eloquently discussed at all domestic and international levels.

As early as by the end of the twentieth century, when information technologies just appeared, E. Toffler wrote that quite soon everyone, operating his/her personal computer, would control the technological process to manufacture products for her/his personal consumption without producing anything redundant (Toffler 1990). Today, for example, Toyota disclosed its plans to develop interactive communications between owners of its brand cars, dealers and head office of the given company. The social network that would unify

millions of people throughout the world was to start functioning in 2012. The system would be based on technologies of corporate social networks, and access thereto will not be available for outsiders. 'Social networks change the means of communication and format of interaction among people', said Toyota President Akio Toyoda. The new social network will be named 'Toyota Friend'. The users will be able to 'communicate' with their cars by sending messages like they do in Twitter and Facebook, while every car will have its own profile. On the other side, electric motor cars will be able to send SMS to the owners' mobile phones in order to remind that, for example, time is coming to charge the battery. Thus, drivers would be able to conduct a sort of conversation with their own cars.

In her book *Technological Revolutions and Financial Capital*, Carlota Perez writes that technological revolutions occurring once per about half-century deliver their outcomes with a time lag. It takes two or three decades of turbulent adaptation and assimilation before the new technologies, sectors and infrastructures would start facilitating the advent of the 'golden age' (*belle époque*), or 'era of prosperity' (Perez 2011: 17). That is, owing to technologies of the twenty-first century that were originated some thirty years ago, production again returns through the household level to a specific human individual.

Consideration of each individual's interests at every local level and conciliation of such interests in real-time regime are the only available driving force that would provide motivation for the higher productivity of labor and accelerated innovative development of socially oriented high-tech forms of production. In such conditions, every specific consumer can become a stakeholder and investor of the given business. Today, however, notwithstanding the crisis, reduction of deposit interest rates and growth of inflation, Russian depositors increase their bank deposits. Here arises the wider disproportion between the time of production and circulation of commodities and money. Channeling of those funds directly to the real sector would favor the more efficient resolution of the task to make our economy much less dependent on raw-resource supplies and to enrich it with the long-expected intellectual dimension. This will be attained due to emergence of new possibilities to create conditions for any person to generate new knowledge in the interests of the entire society and at the same in his/her own interests. Only in such conditions it will be possible to build actually the new, 'smart' economy based on intellectual excellence and production of unique knowledge as well as oriented to continuous improvement of human life quality. Only in such conditions it will be possible 'to replace the resource-based primitive economy by smart economy producing unique knowledge, unique things and technologies, as well as things and technologies being useful for people'. And, only such economy will be the most competitive in creating an absolutely quality of life for people.

Our Proposals

For accelerated formation of the new and at the same time former model of life organization, it appears rational:

- within the shortest period of time to accomplish modernization of Russia and any country of the world through transition to the model of life organization for the state, business, society and each specific human individual with due conciliation of their interests in the real time by systemic application of advanced technologies of the twenty-first century.

As the major precondition for realization of this task, national leaders must have political will to form such level at the municipal, regional and federal level;

- within the shortest periods of time to draw the 'Comprehensive Target Program for Formation of the New Life-Organization Model' and to realize the latter at each local level;

- for elaboration of such 'Comprehensive Target Program', it would be advisable to establish, within the Russian Academy of Sciences, Russian Academy of Natural Sciences and academic communities of concerned countries, an inter-academy and inter-institutional cross-disciplinary cooperation of scientists and practical specialists;

- to provide participation of all national science towns and innovation towns as well as the entire global intellectual community, unified by network cooperation within the Internet in development of the afore-described model with due regard of tax preferences and legal acts. For realization of this program, it is most strongly required to 'energy of youth' – that the best young minds of IT-specialists, software and hardware engineers, researchers, inventors, and others. Armed with new knowledge and understanding of the fact that this projects meets their own interests as well as interests of their relatives, friends and whole society, young talents would be able to formulate their demands to the state and business in precise terms and to build the basis for realization of the new sustainable development paradigm;

- to provide for transfer of the new life-organization model throughout the whole territory of Russia and, probably, the entire planet – may be, under the auspices of the United Nations.

As early as in the book *Forecasting the Future: A New Paradigm* I noted:

The key to the philosophy for building the global society and all its institutions must be served by the following premise: All inhabitants of the Universe share the same origin; all people share the same human nature; all religions share the same divinity, while the entire global community and each human individual share one the same sole objective – to attain the Supreme Reason in their development (Bondarenko 2008).

The major task of the UN or any other institute, established on its basis or within its framework, will be to include a structure that would accumulate all knowledge – from origination of the Humankind to the current time. From this science-tech data pool, it would be possible to receive any knowledge so that in any corner of the planet technological chains could be built between arising and satisfaction of a specific human need, and thus to provide the growing synchronization of all processes in space and at the same for their reduction in time. The missing knowledge is an order for new R&D, new research, experiments and designs (*Ibid.*).

Realization of the given project for the entire global world would be a breakthrough to the future, in which the 'sustainable and crisis-free development' would at last become a logical and regular reality rather than a beautiful abstract slogan. Such a future can and must be formed right today, here and now, with due regard of each specific individual's interests as well as interests of the entire global world. For the contemporary generation of people, harmonization and synchronization of human relations in time and space is the only available chance to create a new quality of life for our contemporaries as well as for future generations. The main point is not to lose time again and not to admit a destructive wave of the new crisis!

References

- Bondarenko, V. 2008.** Chapter 6. Forecasting the Future through the Prism of the New Cognition Methodology, or Future Can Be Only Forecasted from Future! In Fetisov, G. G., and Bondarenko, V. M. (eds.), *Forecasting the Future: A New Paradigm* (pp. 220–270). Moscow: Economika. *In Russian.*
- Bondarenko, V. 2011.** Global Processes and their Dynamics: Two Paradigms of Development. *Journal Globalization Studies* 2(2): 80–89.
- Bondarenko, V. 2012.** Global Processes and Their Dynamics: Two Paradigms of Development. In Grinin L. E., Ilyin I. V., and Korotayev, A. D. (eds.), *Globalistics and Globalization Studies* (pp. 342–349). Volgograd: ‘Uchitel’ Publishing House.
- Grinberg, R. S. 2011.** Introduction Chapter. In Kolodko, G. *Globalization, Transformation, Crisis – What's Next?* Moscow: Magistre. *In Russian.*
- Perez, C. 2011.** *Technological Revolutions and Financial Capital*. Moscow: DELO. *In Russian.*
- Toffler, E. 1990.** *The Third Wave*. New York: Bantam Books.

Part IV. TEACHING GLOBAL STUDIES

Section 1. TEACHING GLOBAL STUDIES: REFLECTIONS AND EXPERIENCES

Multi-Disciplinary Didactics for Curricula of 'Global Studies'

Gilbert Ahamer

Technological innovations can be used in many ways to enhance the suitability of global learning. A newly developed online-supported curriculum 'Global Studies' takes account of the necessities of interdisciplinary, intercultural and interparadigmatic learning. The history and genesis of such an innovative curriculum is embedded in a national umbrella organisation focusing on development studies. As the interdisciplinary core, a new lecture on the fundamentals of Global Studies has been implemented in 2010/11 that envisions team teaching and interdisciplinary perspectives. The web platform allows students to present their professional views and discuss them in a peer review. Dialogue and discourse are enhanced by repeated change of roles which is enriched by the broad international and intercultural backgrounds of the participating students. Cultures of understanding are generated and widened as a prerequisite for future careers in development cooperation, diplomacy and transnational organisations.

Keywords: *Global learning, intercultural, interdisciplinary, interparadigmatic, web-based dialogue, development cooperation.*

1. Underlying Didactics

The didactic thesis of this paper is that web-supported learning tools (Schwartz *et al.* 2003) have to *facilitate intercultural understanding*.

This paper's approach suggests that deeper *dialogue-induced* cognition in Dewey's sense (Berding 1999) can enhance interparadigmatic understanding, civilisational evolution and multicultural education towards democratisation (Purnendu and Tripathi 2003). In a 'learning society', the integration of views and perspectives constitutes the core of multicultural processes.

Moreover, learning technologies will hopefully contribute to entrepreneurialism (Woods and Woods 2011), to a learning community (Robertson 2011), to reflecting on others' philosophies (Wang 2011: 51), and finally achieve mutual integration of learners' views into a consensus. Here the *change of roles* is enabled and prompts learning; this opens up the possibility of using the wide range of game-based learning and role play (Prensky 2001). Managed learning environments are optimally designed in a way to suit

various learner types and may offer opportunities for different personal cognitive and communicative rhythms and patterns (Ahamer 2010: 287; 2011d; 2014).

Concrete usage of *learning technologies* is a clear function of the *underlying didactic concept*.

Well-coordinated *exchange and mutual approximation of academically substantiated views* is the central didactic-pedagogic task in the area of multiculturally and developmentally oriented interparadigmatic curricula such as ‘*Global Studies*’ described earlier (GS 2010: 2; Ahamer *et al.* 2011).

‘*Views on realities*’ are the core element of consideration in intercultural and multicultural learning. Fig.1 symbolizes ‘realities to be learned’ by the globe and – in a more differentiated manner – by a Greek temple. The ‘learning individual’ (up right) uses glasses to view realities ‘through a lens’. The usual concept of interdisciplinarity refers to looking at reality through different parts of the lenses, using different rays from the eye onto the world for different scientific disciplines, when staying in this symbolism.

Fig. 1. Interdisciplinarity means to look through different lenses



2. Interdisciplinarity, Interculturality and Beyond

This paper clearly distinguishes between (1) interdisciplinarity, (2) interculturality and (3) an interperspectivist or interparadigmatic approach.

2.1. Interdisciplinarity

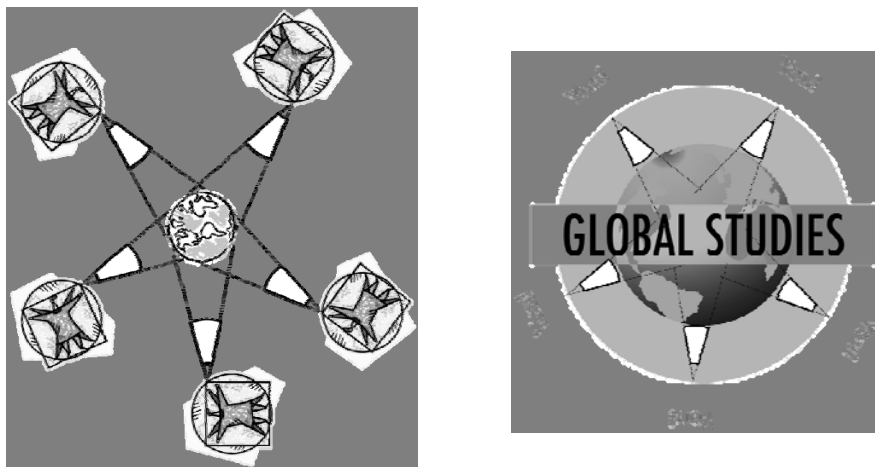
Interdisciplinarity here means to look at one complex issue in the world using *different lenses of perception* (traditionally described as ‘disciplines’). These ‘disciplinary perspec-

tives' are often associated with different faculties. Hence it was imperative for the GS initiative to involve members of all university faculties: law, history, economics, sociology, natural sciences, technology (symbolized by the pillars in Fig. 1).

2.2. Interculturality

As distinct from interdisciplinarity, interculturality means in this article that different actors most likely have different views regarding the same issue in the world (at left in Fig. 2) because they look at it from different standpoints. The framework of Fig. 2 goes beyond 'truths as such' that would have to be recognized during lectures and repeated 'correctly' during exams. What is called for instead is the ability to assess the scope of the area of applicability of competing concepts of understanding.

Fig. 2. Interculturality means to look at the world from different standpoints and hence viewing angles



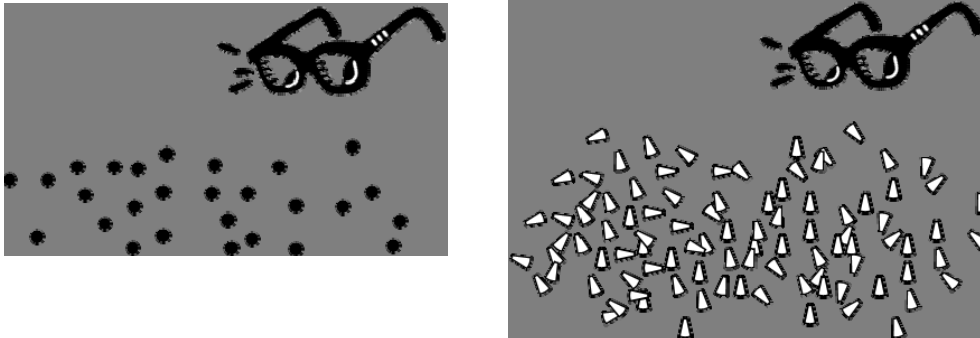
In a collaborative learning environment – hopefully among students *and* teachers – interculturality means to allow for different views of the 'truth' among learners (Cools *et al.*, 2009: 9) who are rooted in different cultural traditions (to varying degrees geographically, religiously, institutionally, socially, corporatively, or individually co-determined) and have different (epistemological) beliefs. This notion of *culture* refers to a 'systemic way of perception' and is composed of 'beliefs, norms, assumptions, knowledge, values or sets of practice that are shared and form a system' (Rapport and Overing 2000; Economides 2008: 244). In this sense, there have been many attempts of rationalising 'cultures' by referring to Hofstede's (2010) cultural dimensions (Sulimma 2006: 75). Clearly there is a need to suitably and integratively understand cross-cultural issues such as dimensions of cultural variability (Hofstede 1980, 2001; Olaniran and Agnello 2005: 74) for target-oriented intercultural work.

2.3. An interspectivist and interparadigmatic approach

However, in this paper we focus on the students' *ability to slip into the roles of members of different cultures*. This is exactly the skill needed to successfully participate in professional international projects – and this skill should be trained by 'Global Studies'.

It is essential for the *intersperspectivistic* approach used in ‘Global Studies’ to concentrate not only on ‘facts’ but rather on ‘views’ as learning objectives. Fig. 2 proposes to depict views as viewing angles. Fig. 3 contrasts such fundamentally different acts of learning: namely to either understand only facts (left, the points symbolize the globes to be cognized in Fig. 1) or rather the views on facts (right, the angles symbolize the perspectives in Fig. 1).

Fig. 3. Learners (symbolized by glasses) can either concentrate on facts (symbolized by points, at left) or concentrate on perspectives on facts (symbolized by viewing angles, at right)



It is the target of ‘GS’ to *train intersperspectivism and interparadigmatic understanding*.

3. The Mission of Global Studies in Graz

Since 2004 a *bundle of electives* has been implemented and in 2010 a *master's curriculum* was started at Graz University after seven years of work led by the ‘Steering Committee Global Studies’ (SC GS 2010).

Dr. Karl Kumpfmüller, an Austrian pioneer in peace research, initiated ‘Global Studies’ in 2004 as a joint effort of NGOs and all departments at Graz University. Around fifty sessions of the ‘Steering Committee Global Studies’ (SC GS 2010) constituted the core driving force of the GS initiative in Graz and were overseen by its founder. The spirit in the SC GS is an inclusive one with a respectful academic peer-oriented culture where the inputs and views of all members are equally valued based on commonly accepted ethical values (Tibi 2009) of a (socially and ecologically) sustainable global development and (transparent & peer-oriented) academic discursive practice.

Understood in a positive sense, ‘Globalisation could (literally) mean international co-operation, worldwide networking, democratic shared ownership, justices of distribution, fair exchange, existential security for all people on Earth – in brief this notion suggests a dynamically developing worldwide system that grants and secures for each single human being his/her unalienable share of existing economic, political, cultural and spiritual power’ (Kumpfmüller 2005: 18). However, ‘globalisation as an ideological construct and as a political reality means the contrary, namely increasing inequality and injustice; it impedes development and increases poverty, and is inclined to military power’. Throughout history, two opposite concepts of human convivance have striven for implementation (de-

noted in Latin): *pax* relies on ruling by dominance, and *concordia* seeks to achieve harmony of interests (Kumpfmüller 2009: 329). Emphasising its opportunities, ‘another globalisation, a bottom-up globalisation is needed, including respect of human rights, social and economic justice and an open dialogue of cultures (...)’ (Kumpfmüller 2005: 19; 2001).

3.1. The roots of GS Graz

Since GS was founded in 2004, all strategic decisions have been taken by the Steering Committee on the basis of respectful discussion among all involved faculty members from *all* six university departments in the spirit of participative democracy and have been transparently documented in the protocols of the Steering Committee prepared by the SC members from the Afro-Asian Institute (AAI 2010) who provided office space for the bi-monthly meetings. The location of the Steering Committee's sessions at the Afro-Asian Institute is a symbol for the engagement of NGOs in the spirit of mutual cooperation with the university. The following section comprising the entire chapter 3 is taken from the seminal definition of Global Studies addressed to the Senate of Graz University that led to the inauguration of a curricula commission (Kumpfmüller 2007).

3.2. The need for Global Studies

The idea and initiative to set up a curricula commission for a ‘Global Studies’ Master's degree program at the Karl-Franzens University Graz as a separate Master's curriculum for Global Studies (Kumpfmüller 2007: 1) is based on the growing importance of issues such as climate change and the shortage of resources, famine and mass poverty, terrorism and violence that are a proxy for a large number of unresolved global problems and challenges. Universities are seismographic places in a learning society and are apt for mediation among stakeholders. Particularly young people need both comprehensive and specialised training including basic academic knowledge and awareness, cosmopolitan orientation and empowerment in an increasingly complex globalised world.

3.3. The goals of Global Studies

The primary goal of the ‘Global Studies’ Master's program is to convey and promote understanding of the global society, its mechanisms, interdependencies and problems as the basis for strengthening responsible governance to confront the resulting issues. The participants in the GS program will, amongst others, be able to:

- develop a basic understanding of different cultures and world views from different perspectives and disciplines (history, philosophy, economics, politics, law, culture, literature, religion *etc.*) and to understand global interconnections;
- understand the interdependence of global phenomena and processes in an interconnected world and to recognize it as a historical process;
- analyse the structural disadvantage of a majority of people (poverty, hunger, illiteracy, marginalisation and lawlessness *etc.*) and its various causes and be capable of discussing alternative scenarios and different approaches for a solution;
- recognise the importance of sustainably dealing with the environment, particularly the protection of the climate and species as a joint global challenge;
- take account of the gender issue as crucial for local and global social development processes;
- acquire basic knowledge in the fields of international law, human rights and international organizations;

- understand and analyze the current dynamics of modern-day economy, world trade and global financial systems;
- recognize the role and responsibility of globally effective players and institutions in their impact on peace and development;
- gain understanding and a greater empowerment for development cooperation and independent development processes;
- develop on the basis of selected country studies and thematic studies concrete global situation analyses and appropriate strategies for solutions;
- receive insights into issues pertaining to intercultural communication and world religions.

In 'Global Studies Graz', '*development*' is understood as *growing jointly in responsibility*.

3.4. The institutional context of the GS initiative

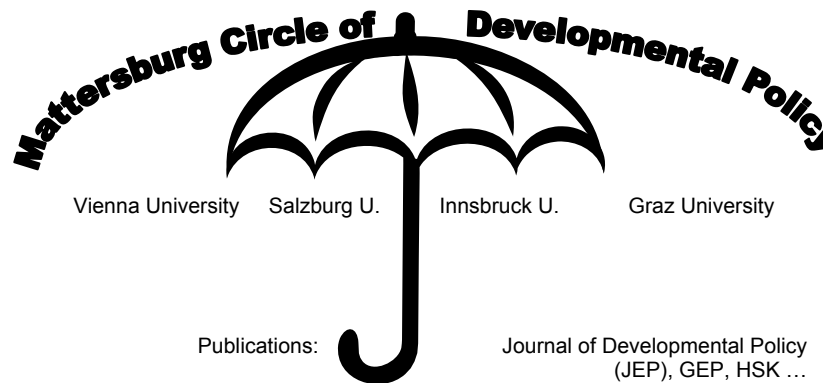
At the *University of Graz*, existing structures already comprise a large number of experts and institutions in the areas of GS, for example:

- the Wegener Center for Climate and Global Change (WegCenter 2010);
- the Research Cluster 'Environment and Global Change' headed by the Wegener Center;
- the Curriculum in Environmental Systems Science (USW 2011);
- the Academy for New Media and Technology Transfer (ANM 2010);
- the UNESCO Chair for Intercultural and Interreligious Dialogue;
- the Regional Center of Expertise in Education for Sustainable Development (RCE 2010).

Within the institutional landscape *outside the university*, several separate NGOs as well as the national umbrella organisation have cooperated with and contributed to GS:

- the European Training and Research Centre for Human Rights & Democracy (ETC 2010);
- the Peace Centre of the City of Graz;
- the Afro-Asian Institute and the 'Welthaus' of the Graz diocese (all located in Graz);
- the former AGEZ (Work Group on Developmental Cooperation), now 'Global Responsibility' (2010) with its over 40 national member organizations;
- the Austria-wide umbrella research cluster 'Environment and Global Change';
- the Mattersburg Circle of Developmental Policy as a national umbrella organisation (Fig. 4) that in turn (co-)organises biannual Developmental Conferences and a Developmental Dialogue Group; it also cooperates with the Paolo Freire Centre (PFC 2010), all with an emphasis on Vienna.

Fig. 4. Developmental curricula in Austria act under the umbrella of the national umbrella organisation 'Mattersburg Circle of Developmental Policy' and are based on regular publication series providing peer reviewed content (Fischer and Kolland 2009)



4. Two Curricula for 'Global Studies' in Graz

4.1. Bundle of electives 'Global Studies'

Operating since 2004, the bundle of electives 'Global Studies' is an interdisciplinary study program at the University of Graz as defined by the 'Preamble GS' (2010) which was co-operatively developed and accepted by the Steering Committee at the initiative's outset. GS combines course units from different faculties and departments of the University of Graz that address global issues and which are annually selected by GS representatives from *all* university departments. The bundle of electives 'Global Studies' is not yet an independent programme of study, but students enrolled in a wide range of existing curricula can take GS courses as electives (a predefined number of electives being required within their own curriculum) and receive course credit for them. In addition, students of Global Studies are awarded a special certificate when they pass courses amounting to 40 ECTS (European Credit Transfer Points).

Global Studies aims to develop students' understanding of the mechanisms, interdependencies and problems of today's global society. Courses in different relevant disciplines give future decision-makers the academic grounding that they need to make informed choices and act in a globally responsible way. The programme sharpens perception on global issues, facilitates understanding of different cultures and systems, and strengthens competence in intercultural communication by demanding academic achievements in each of these six modules:

- Module 1 >> Globalisation, Development, Sustainability, Gender – An Introduction
- Module 2 >> World History
- Module 3 >> World Economics
- Module 4 >> World Politics and International Law
- Module 5 >> World Cultures, World Religions and World Ethics
- Module 6 >> Organisational and Social Skills.

At least two semester hours per module have to be passed in each module (Table 1) in addition to the compulsory 'Introduction to Global Studies' (Kumpfmüller 2010). The remaining credit hours are free electives, but they must be part of different modules. The internship amounts to a minimum of one month of practical work in a non-university organisation focusing on a topic that is relevant to GS.

Table 1. For the bundle of electives 'Global Studies', a minimum number of two courses must be completed from each module. The required total amounts to 24 semester hours per week (40 ECTS)

Recommended year	Type of lectures required	Hours per week
1	introductory lecture Global Studies	2
1 & 2	2 credits from each of the 6 modules	12
2	free electives from at least 2 different modules	10
<i>Total</i>		<i>24</i>

A so-called 'Ring Lecture' (introductory lecture series presented by various speakers) has been held annually since 2005. For a statistical analysis of students following this bundle of electives, see (Ahamer *et al.* 2011: 29–33).

4.2. The initial plan for a 'Global Studies' Master's curriculum

The initial proposal to the university senate (Kumpfmüller 2007: 3–4) produced after intensive and consensus-oriented iterative discussions outlined eight modules in a proposal to the curricula commission in order to cover the interdisciplinary scientific breadth of 'Global Studies' in *eight* modules:

- Module 1 >> *Globalisation, Sustainable Development, Gender – An Introduction* including the topics of development, globalisation and global change, sustainability and globalisation; gender equality; global learning, *etc.*
- Module 2 >> *World History* with the topics: history of cultural realms, colonial history and European imperialism and colonialism, post- and neo-colonialism, migration, *etc.*
- Module 3 >> *World Economics*: free trade theories, international trade and economic institutions, global financial systems and international debt, development economics and development cooperation, population theories and environmental economics, *etc.*
- Module 4 >> *World Politics and International Law*: theories of international relations, international politics; critical peace research; international and European law; comparative analysis of legislation, *etc.*
- Module 5 >> *World Cultures, World Religions and World Ethics*: Introduction to cultural anthropology, language, culture and religion in the globalisation process; cultural identity and gender, global citizenship, global ethics, *etc.*
- Module 6 >> *Organisational Development and Social Skills*: Projects in the context of global issues (*e.g.*, via the Austrian Development Cooperation); non-governmental organizations and networks; intervention research, *etc.*
- Module 7 >> *World Climate, Environment and Technology*: climate change, environmental problems, technology assessment, communication technologies, sustainable development.
- Module 8 >> *Global Learning*: international cultural and economic spaces, intercultural communication, human rights, and minorities in the globalisation process.

4.3. Final 'Global Studies' Master's curriculum

The above proposal for eight modules (Chapter 4.2) was *shortened* by the recently established 'curricula commission master study GS' (having a varying number of active members) and cut down to *fewer* modules. Initially, for each scientific discipline two obligatory introductory courses and two obligatory advanced courses were confirmed as mandatory, each out of four modules (representing groups of scientific disciplines); but later the decision was made that (a) one 'basic module' should cover all introductory courses and (b) for the advanced level only *two* out of the remaining *five* modules are required (Table 2). Financial shortage might have been the main perceived reason for this curriculum change.

Table 2. General structure of the final GS master's curriculum (2010) amounting to 120 ECTS

Module name	status	ECTS
Basic module A: Global Studies	compulsory	29
<i>Two modules out of B through F</i>	<i>mandatory choice from B-F</i>	<i>24</i>
Module B: Law and Politics		12
Module C: Economics		12
Module D: History		12
Module E: Environment, Climate and Technology		12
Module F: Culture, Religion, Society and Gender		12
Module G: Practical Experience	Compulsory	18
Module H: Master module (thesis etc.)	Compulsory	37
Free electives	free choice	12

This curriculum is available online in pdf or html format (GS 2010). As of October 2010, the first group of some one hundred students started this curriculum. As an important consequence of the above curriculum changes, the crucial cognitive basis of this interdisciplinary master's curriculum is to be conveyed in the course of the so-called '*Basics of Global Studies*' (Basics of GS 2011) lecture with 15 ECTS (within basic module A) containing input from all disciplines that comprise GS. Because only two modules from B to F have to be selected from the 'advanced' list of courses, in a 'pessimistic' scenario a student would pass only one or two weekly semester hours (~4 ECTS) of several of the interdisciplinary constituents of 'Global Studies'. The seven year long planning process of the SC GS, however, has always tried to ensure thorough interdisciplinarity across *all* modules.

A very important component of the final curriculum is practical experience (module G in Table 2) that has to be acquired outside the university, in the sense of a 'reflective practice' (Malone and Wilder 2008). In the spirit of the pedagogy of Freire (1970), the immer-

sion into the real living situation of deprived people is the objective of this practical exercise including a required academic analysis, 'inquiry' and 'reflection in action'.

5. Facts and Figures for the GS Master'S Curriculum

As compared to the facts and figure pertaining to the 'bundle of electives GS' presented in Ahamer *et al.* (2011: 23–33), this chapter shows statistics on the GS master curriculum.

Fig. 5. The central lecture is 'Basics of GS'. Distribution of the 158 enrolled students for the first academic year 2010/11 according to their disciplinary origin. Only 49 are typical GS master's students (top row), the others have selected this lecture from their curriculum, possibly to switch curricula later on

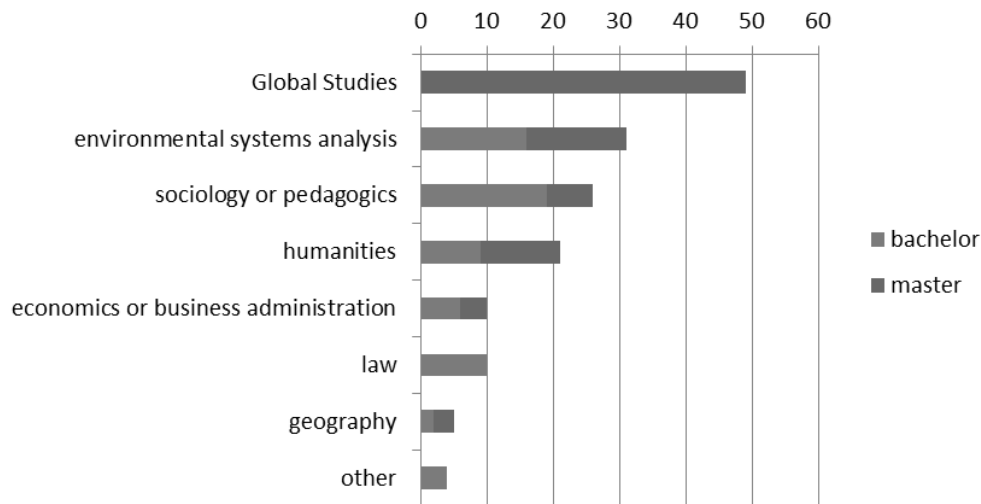


Fig. 7 shows that only 31 per cent of the students enrolled in the introductory and key lecture 'Basics of Global Studies' are typical master's students in GS, the others pertained to other curricula and selected this core lecture as an elective for their own curriculum, possibly partly with the goal to start GS when having finished their bachelor's degree. Fig. 8 identifies the year of entry into studies (at Austrian universities) by using the immatriculation number and shows that most students are in or around their fourth year of studies.

Fig. 6. Years of entry into studies (at Austrian universities) for the students having enrolled in the first year of the GS master's programme in Graz

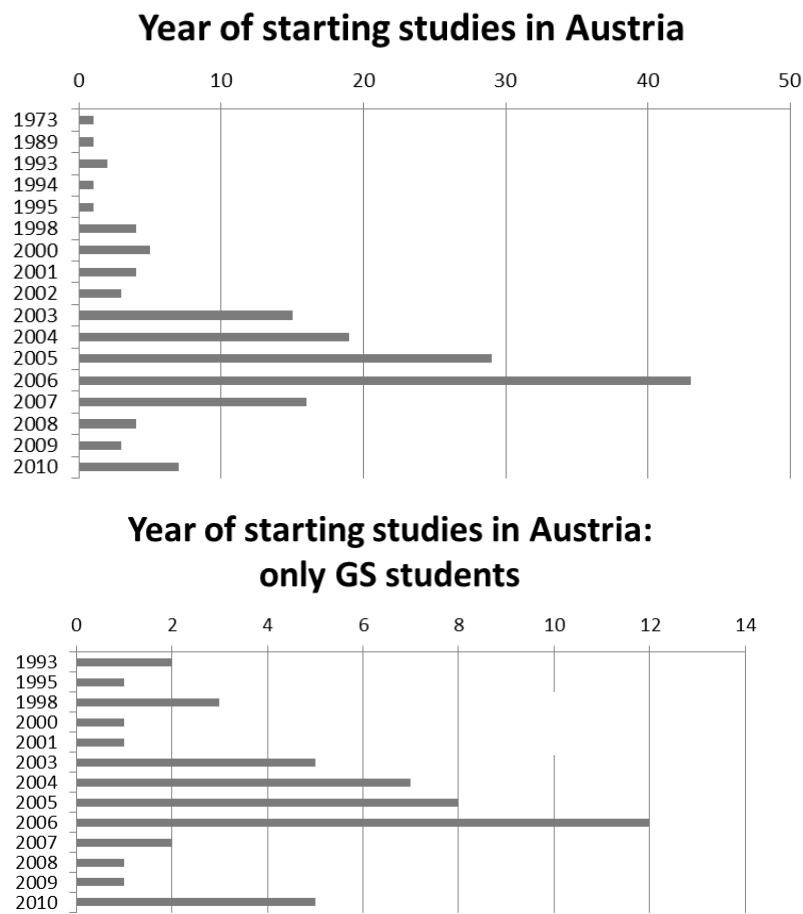


Fig. 9 shows that the marks for the key lecture 'Basics of GS' (at left) were composed by six components with an almost similar degree of difficulty (at right, symbolized by the columns in Fig. 1). Most students reached only around half of the possible points, that is the breakeven for a positive mark. Differences between the subsample of GS versus other students were significant only in sociology and culture (Fig. 10). The next chapter provides possible reasons, namely a structured dialogic online procedure that was followed mostly only by GS students.

Fig. 7. Results for the exams in 'Basics of Global Studies', the core lecture of GS Graz in 2011 (at left), as composed by the 6 'interfaculty' disciplines (at right)

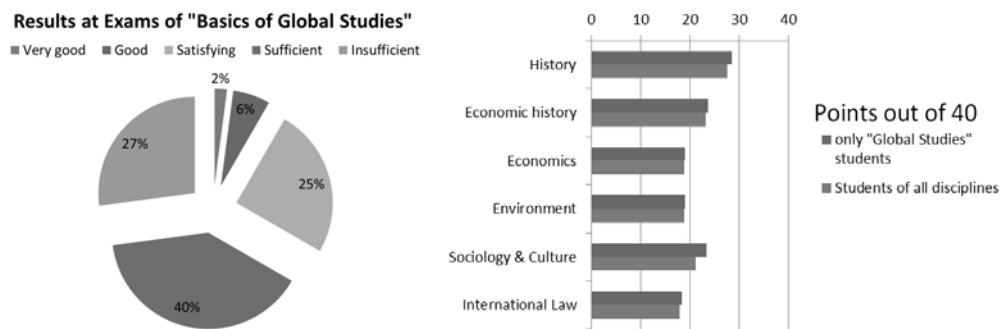


Fig. 8. Comparison of the achievements of students from different disciplines in the lecture 'Basics of Global Studies' in 2010/11, ordered from best to worst total achievement (light grey = on average better in this discipline than Global Studies students, bold = worse than Global Studies students on average); BA = bachelor, MA = master. Best achievers were philosophy students, GS students were only slightly better than the average in all disciplines

Curriculum	History	Economic History	Economics	Environment	Sociology	Culture	Internatl. Law	Total
Philosophy Bachelor = BA	34.0	32.0	25.0	25.0	19.0	11.2	32.0	178.2
Philosophy Master = MA	33.0	29.0	30.0	20.0	14.0	9.5	17.0	152.5
Environment (Econ.) MA	24.0	19.0	13.0	31.0	5.0	10.9	35.0	137.9
Sociology BA	22.5	25.5	22.0	20.0	12.5	14.2	20.5	137.2
Global Studies = MA	28.6	23.7	19.1	19.0	12.1	11.3	18.4	132.2
Environment (Science) MA	28.0	23.0	20.0	20.0	10.0	9.6	19.0	129.6
Environment (Econ.) BA	31.0	23.5	18.5	25.5	4.5	4.5	12.0	119.5
Law	21.0	27.0	11.0	19.0	16.0	5.0	17.0	116.0
Economics BA	28.0	25.0	21.0	16.0	9.0	4.4	12.0	115.4
Education MA	36.0	22.0	18.0	8.0	6.0	8.6	8.0	106.6
Business administration BA	15.0	23.0	12.0	11.5	6.0	5.5	21.0	94.0
Translation Engl., Span.	31.0	13.0	17.0	0.0	7.0	7.4	11.0	86.4
All disciplines	27.6	23.2	18.9	18.8	11.2	10.1	18.0	127.8

6. IT may Act as Turbo for Dialogic Learning

Out of the 8 lecturers teaching the 6 main disciplines taught in 'Basics of GS' (see right in Fig. 9), only the author made extensive use of information technologies (IT) for learning, for example, web-based learning (Ahamer 2011c). The other lecturers only provided course notes as slides via email (including additional reading material). Therefore the statistical material presented may hint at the usefulness of e-learning strategies for multicultural learning.

6.1. Lessons from a guided peer-review process

Earlier experiences have suggested to use an online discussion forum (part of the WebCT learning platform, see Fig. 11) not only for downloading lecture notes but especially for writing and mutually reviewing students' standpoints (Fig. 12) which does pose a framework for repeating and improving students' achievements. According to the lecturer's impressions, the quality of written work has doubled, especially for previously weak students. A sizeable number of students comes from outside Austria, for example, from all three former conflict parties in former Yugoslavia (however, cordially socializing in Graz) or from Muslim Africa, thus representing a true multicultural setting. While most of the students already hold a bachelor's degree and are at master's level (see at left in Fig. 10), many are still inexperienced in writing differentiated views on intercultural issues evaluating several viewpoints at a time. A web-based discussion forum enables students

1. to take enough time to review their peers' work in very detailed manner, word by word, and to comment on their classmates' texts (~10 comments per students on average);
2. to update their own previously authored texts in the light of the *reviews other colleagues have received* (for didactic reasons this was a double-open review, versus a double-blind review);
3. to receive very specific review comments from their peers (typically from 3–4 colleagues) that allow authors to judge the focus and variance of received comments;
4. to receive specific and strict comments from the lecturer (typically 10–20 comments, length of comments was often equal to the length of the original text, each single citation was retrieved and double-checked, often via Google Books);
5. to iteratively and considerably improve their own texts before final assessment by the lecturer which is not at all common in the *de facto* Austrian university system.

Fig. 9. The 'Basics of GS' platform (at left) and the distribution of achievable points for the subject 'culture': 20 points can be achieved by answering four questions during an overloaded 5h written test (for all 6 subjects) or also by beforehand writing a reviewable standpoint (5 p.) and 6 shorter examples 'Ex' (in sum 10 p.) using a web discussion forum.

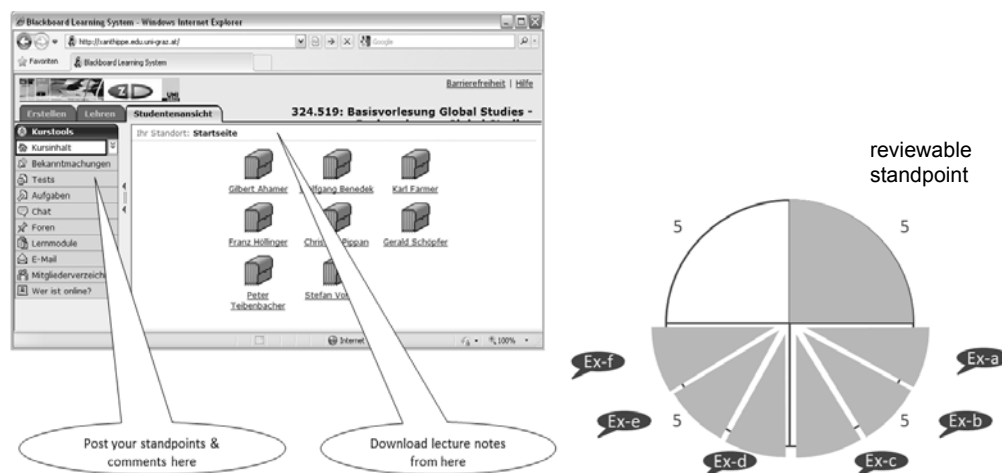
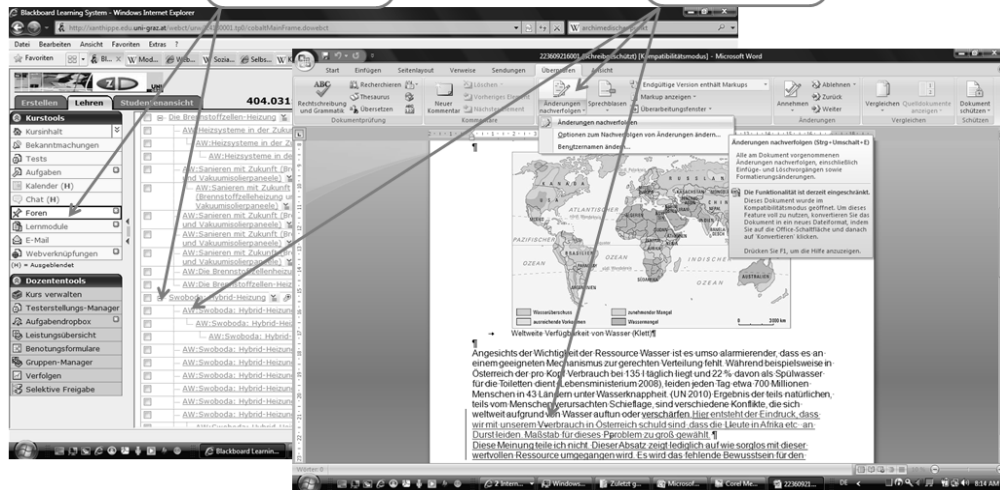


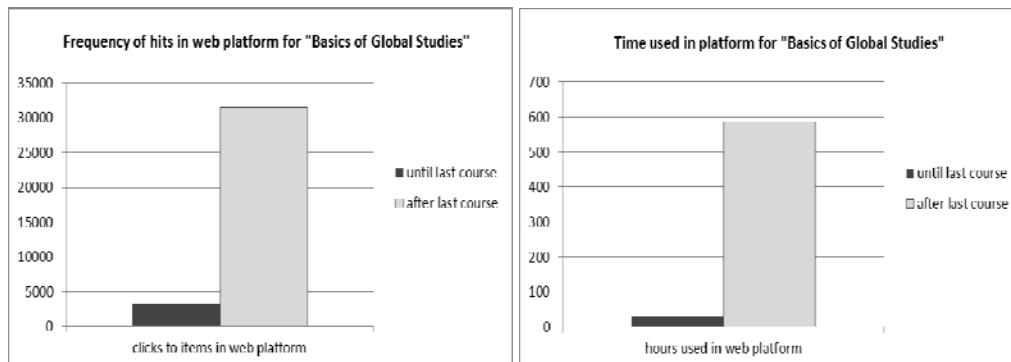
Fig. 10. Usage of reviews was enabled for the 'Basics of GS' lecture. Students (1) deepened their academic competences and (2) grew together as a social group by this didactic strategy

- Usage of (1) discussion fora inside WebCT for (2) reviewed docs in a thread



In this (guided) review process the communicational characteristic was that the lecturer provided strict additional reviews by himself and that marks were announced to be highly competitive for this lecture on 'culture'. Thus, the strikingly high activity of students on the web platform (Fig. 13) makes sense: 90–95 per cent of all activities took place after the face-to-face lectures in the lecture hall during very intense two months between lectures and exam.

Fig. 11. The frequency of web platform usage is highest after the last lecture in the course. In the key GS lecture, 90 per cent of hits and 95 per cent of time was registered after the last lecture of the author. This underlines that a web platform adds a turbo to learning.



During a total of 2053 sessions of an average duration of 16 minutes, over 31000 hits were registered on the WebCT web platform; sessions (16 on a daily average) peaked around 13:00 to 14:00, mainly in the months of December 2010 to January 2011. While all 'Ba-

sics of GS' face-to-face lectures ended in January (and lectures specifically on culture already in December), students received the additional assignment from the 'culture' lecturer for (a) the reviewable standpoint and (b) the six examples 'Ex' (Fig. 11) with a deadline of January and February, respectively, which created the eminent *post-course* web activity (light brown areas in Fig. 13 and Fig. 16).

The underlying didactic and pedagogic idea was to use the large dialogic potential of the web platform in order to strengthen students' understanding of standpoints different from their own (Ahamer and Jekel 2010). Fig. 14 shows that this target was reached quantitatively, both if measured by means of time and hits. Expressed in an aggregated manner, over 128 hours were spent in discussion fora (45 per cent of all sessions) while 101 hours were spent retrieving and reading files (35 per cent of all sessions) by students (first two bars in Fig. 15). The insert in Fig. 15 stresses again the fact that work on the peer-reviewable 'standpoints on developmental theories' has exclusively taken place after the last lecture in the lecture hall. The essence of this assignment was to interparadigmatically compare opposing approaches, of which 'neo-colonialism' and 'dependency theory' might represent extreme views.

Fig. 12. Both the measured distribution of web page hits (at left) and of invested time (at right) shows that dialogic tools in the platform (posting, reviewing) were used more frequently than monologic tools (content conveyed by lecture notes)

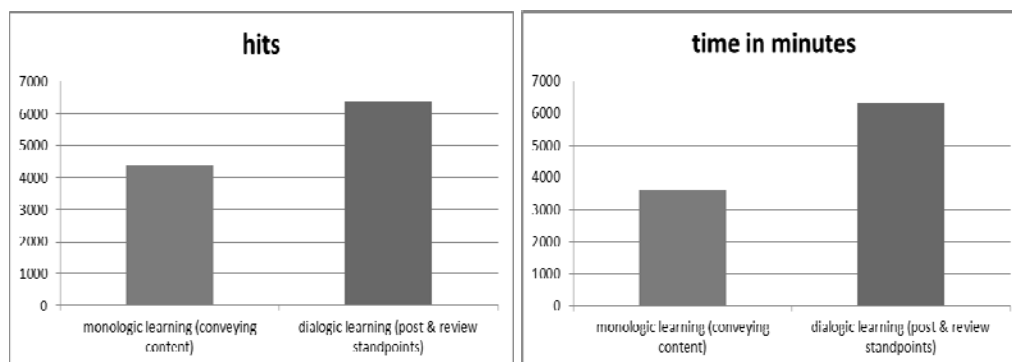


Fig. 13. Tools: more 'for a' than 'files' or 'folders'!

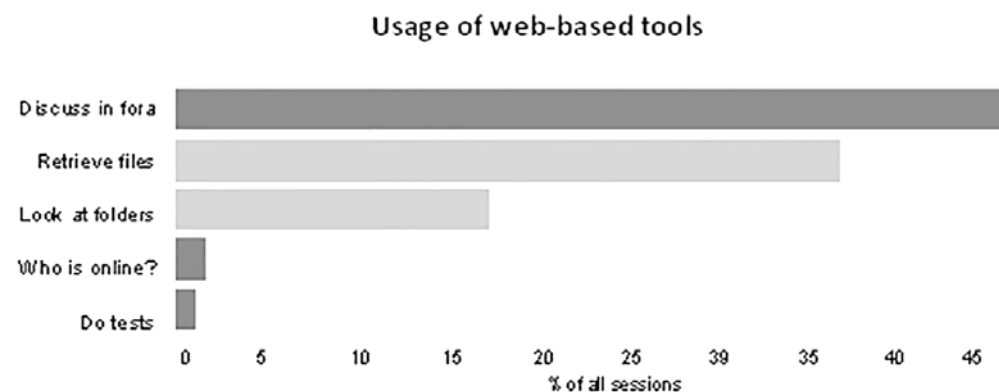
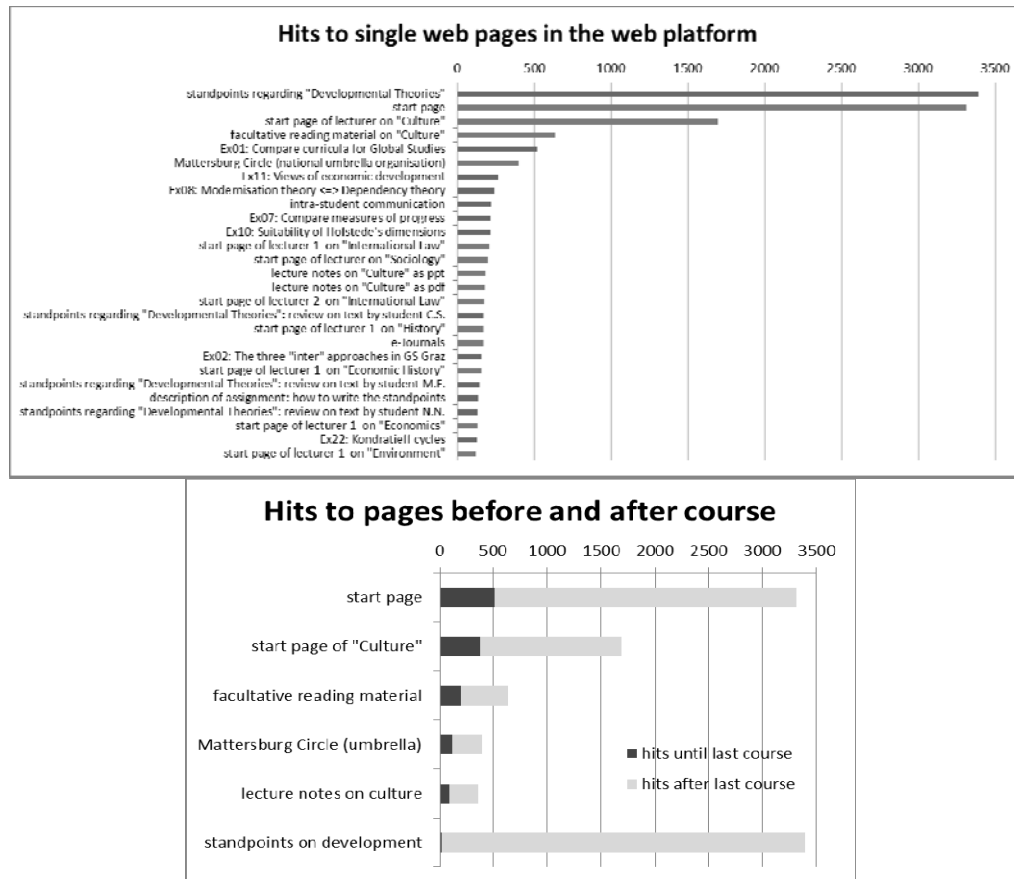


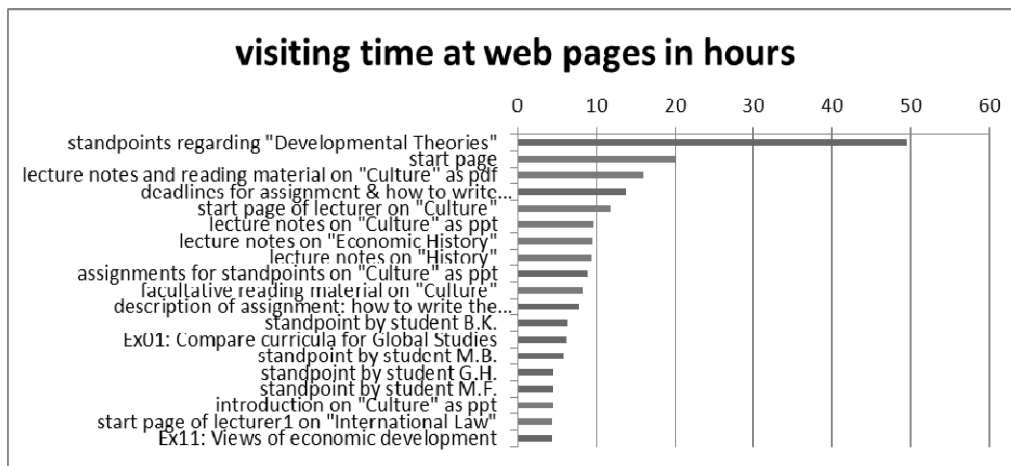
Fig. 15 shows that discussion fora (dialogic tools) received more hits than downloadable files or (monologic tools).

Fig. 14. Hits to single web pages on the web platform (at left). Insert at right: the most important web pages are differentiated into "before" and "after" the last course at the lecture hall in order to quantify the "virtual only" student activities: the peer-reviewable "standpoints" were worked on only after the end of face-to-face courses



The single one most hit page was the one leading to the '1 page standpoint on diverse developmental theories' that had to be reviewed by all students in order to foster interparadigmatic understanding (top bar in Fig. 16 and Fig. 17).

Fig. 15. Visiting times for single web pages on the web platform. The page for the reviewable standpoints on developmental theories was by far the most visited of all pages – a clear success for dialogic and discursive learning



Both Fig. 16 and Fig. 17 show that single web pages regarding *dialogic learning* were used more frequently than for *monologic learning*. The conclusion is that students prefer a communicative structure when studying. Hence, IT-based learning constructed as dialogue is far more accepted by learners than mere 'file download' – which is an embryonic style of e-learning.

It was already mentioned earlier that the key skill in intercultural learning is the understanding of views on complex realities that differ from one's own. The listed items in Fig. 16 and Fig. 17 include assignments such as 'Views of economic development' and 'Modernisation theory versus Dependency theory' that lie at the heart of conceptual tensions in developmental policy and practice. By receiving and giving reviewer's feedback to and from colleagues (and the lecturer) students learn to understand facets of the complex field of economic, cultural and institutional development characteristic for 'global change'. It is hence essential that the didactic *structure* of this course stays in analogy to the course's *content*, namely using a dialogic emphasis.

Both Fig. 16 and Fig. 17 show that some of the students' postings reached a better hit number and visiting time than original 'course notes' delivered by lecturers. This can be understood as: students use *more* of their own (intermediate) results for learning than (some) lecturers' texts!

Fig. 16. Cumulative frequency distributions of sessions and total time, of monologically oriented web activities (folders and files visited) and of dialogically oriented web activities (postings read and published, chat pages). Postings were the main means of delivering (dialogic) results while chats were not especially encouraged

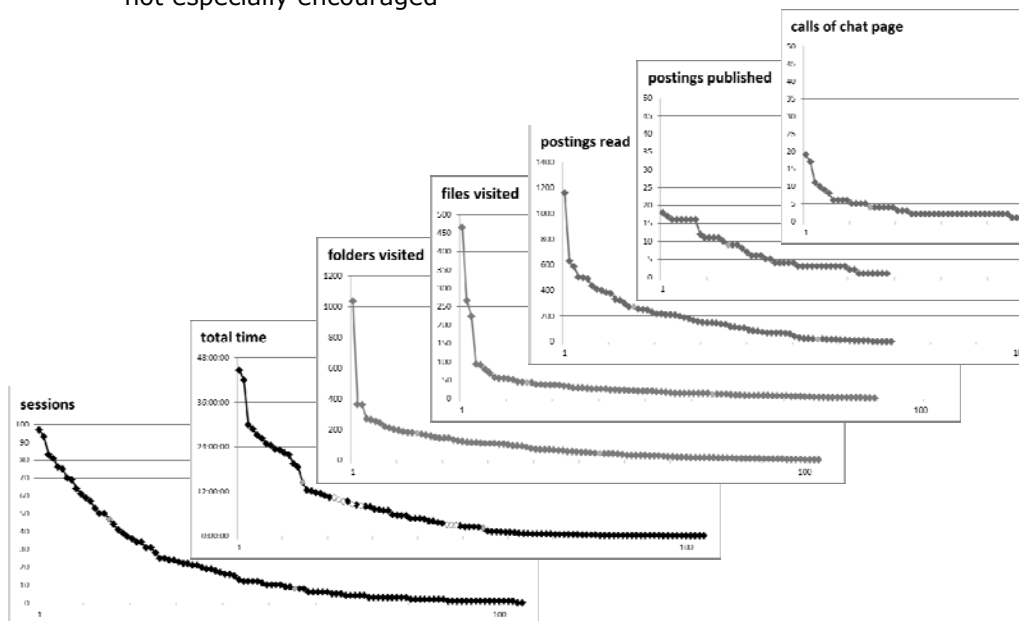


Fig. 18 shows six parameters applying to all 105 students in a manner sorted according to their values. Such a cumulative frequency distribution is able to give aggregated insights into basic descriptors of social dynamics among the students. The ‘sessions’ curve shows “normal” statistical behaviour, the ‘total time spent on the web platform’ curve suggests hypothesizing two clusters of 15 and 55 students (marked by green points) according to the amount of time they invested.

As an orientation, a number of 50 students (equalling the median of all 100 students active on the WebCT, or the number of students immatriculated in GS, or the number of students spending more than 3 hours on the WebCT) is used for the following aggregate assessments:

- while the most active student completed ~100 sessions, half of them had at least 10 sessions;
- while the best web watcher spent 44 hours on the platform, half were there >3 hours;
- while the most active visitor visited over 1000 folder pages, half visited >10 folders;
- while the most active downloader viewed 470 files, half viewed >12 files;
- while the most active forum member viewed ~1200 posts, half viewed 20 posts;
- while the most active forum poster published 18 postings, half posted 1 or more.

A thorough analysis of individual students' performance shows: out of the 45 students who attempted the written exam for the entire course on ‘Basics of GS’, three never accessed the WebCT or did not even register there. The nine students who failed this exam are marked with a white point on the ‘total time’ curve of Fig. 18, they all spent less than

twelve hours on the web platform. On the other hand, all the 20 students with the highest total WebCT presence time passed the exam at their first attempt, which indicates the usefulness of IT-based learning.

This principal result is more striking when singling out only the 'culture' performance: all (but one) of the 15 students with the highest amount of time spent on the web platform were ranked among the best 17 performers in the subject 'culture' (Fig. 20 top right).

When looking for correlations among descriptors for students' performance (*e.g.*, displayed as ordered series in Fig. 19), it becomes evident that diverse subject matters are not closely correlated with each other (Fig. 20). A tentative 'interdisciplinary landscape' or 'sociogram' of the GS subject matters is displayed in Fig. 21 when using the $1/r^2$ values (see table) as distances between the circles.

Fig. 17. Comparison of students' performance at the exam for different scientific disciplines does not visibly correlate which is typical for interdisciplinary curricula

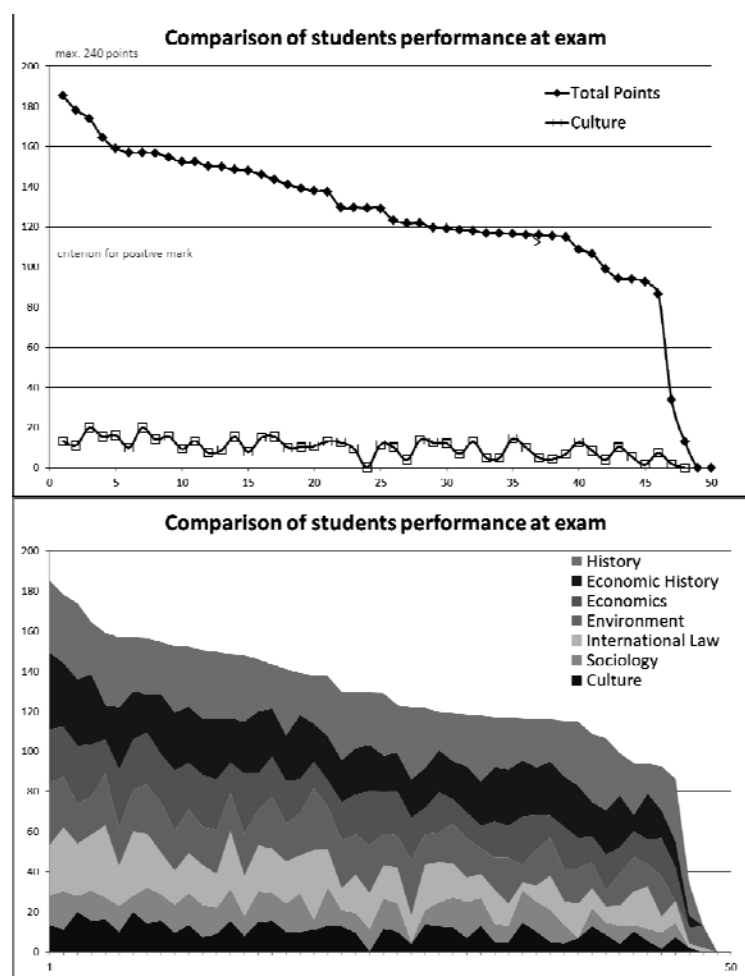


Fig. 18. Ordered graphs of points achieved in 'culture' (above left) show that half of all students were evaluated positive in this discipline. The number of

postings published in the same sequence of students suggests an existent but not very striking correlation (above right). In general, correlations between the achievements in 'culture' with the achievements in other disciplines vary widely, as expectable for interdisciplinary lectures (below)

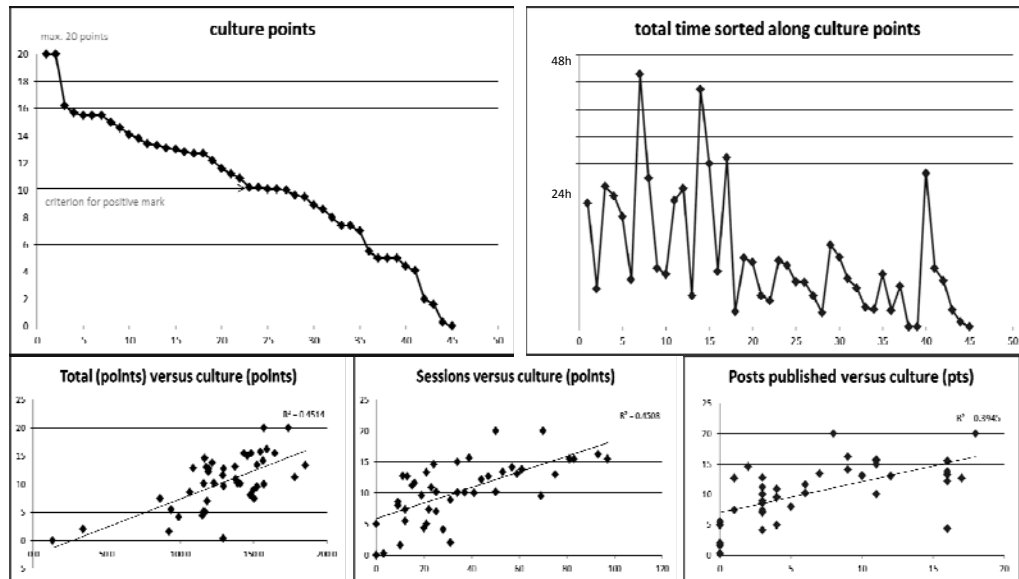
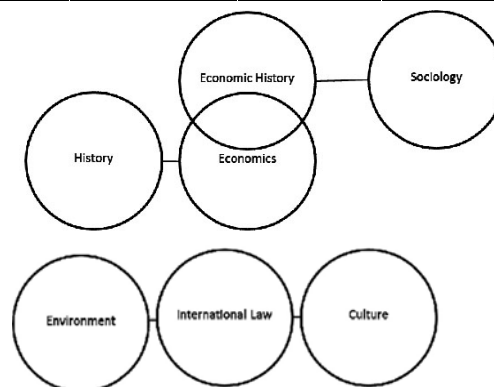


Fig. 19. Above: Correlations between achieved points in the individual disciplinary subjects are characterized by the coefficient of determination r^2 . Below: Tentative links between the subjects when relying on these correlations of the exam results

r^2	History	Economic History	Economics	Environment	Sociology	Culture
Economic History	0.05					
Economics	0.33	0.44				
Environment	0.09	0.16	0.16			
Sociology	0.04	0.30	0.17	0.07		
Culture	0.16	0.13	0.13	0.06	0.18	
International Law	0.13	0.16	0.17	0.34	0.01	0.38



In total, the author thinks that the most important *lessons from this 'guided peer review process'* are well-accepted students' opportunities:

- to receive friendly but strict reviews from both student colleagues and the lecturer and to considerably improve text quality on the basis of such a strict review process;
- to learn from reviews other students have received (this was made use of widely, the 25 most active students read more than 200 postings!);
- to create a social web that was based on more than five minutes of accidental conversation in the lecture hall or on the corridors.

Thus, the author thinks that IT is able to strongly contribute to a *sound academic social network between learners* based on academic excellence that would not have been possible without IT tools such as web platforms.

A guided review situation favours motivation oriented towards 'fulfilling *external targets*'.

6.2. Lessons from an unguided peer review process

Another (unguided) review process was reported earlier in great statistical detail (Ahamer 2011a, 2011b). As a contrast to the experience above, a more unguided and hence autopoietic social process exhibited rather orientation at 'what do students believe that their colleagues would appreciate' and rather led to mutual assistance, quite similar to 'citation cartels' hypothesized by some authors to exist even at later stages of academic careers.

In such unguided processes, the two following self-organising (autopoietic) social mechanisms seem to take place (when differentiating between more 'pragmatic' and more 'idealistic' students):

(1) The guiding motivation for the two subsets (more 'pragmatic' and more 'idealistic' reviewers) for their *actions* (*i.e.* what they give) seems to be as displayed in Table 3.

Table 3. Guiding motivation for the two subsets ('pragmatic' and 'idealistic') reviewers for their actions (what they give)

<i>Actions</i>	<i>pragmatic reviewers</i>	<i>idealistic reviewers</i>
How many reviews do I perform?	• Certainly the more I receive	• I don't care how many I receive
How mildly will I perform my reviews?	• Certainly the milder my received reviews are	• I don't care how mild my received reviews are

(2) The guiding expectation for the two subsets (more 'pragmatic' and more 'idealistic' reviewers) for their *receptions* (*i.e.* what they receive) seems to be as displayed in Table 4:

Table 4. Guiding expectation for the two subsets ('pragmatic' and 'idealistic') of reviewers for their receptions (what they receive)

<i>reactions</i>	<i>pragmatic reviewers</i>	<i>idealistic reviewers</i>
How many reviews do I receive?	• certainly the more reviews I have given	• I don't know, possibly the milder I have been
How mild will my received reviews be?	• certainly the milder my distributed reviews were	• I don't know, possibly the more reviews I have received

From Table 3 (left) it can be concluded that 'pragmatic reviewers' have two potentially inciting arguments for higher levels of own activity that both refer to what they have ex-

perienced themselves so far. Systemically speaking, this constitutes a feedback circle that might be coupled back in a proportionate manner (*i.e.* positive feedback circle). ‘Idealistic reviewers’ have no such feedback loop constituted by their pattern of motivation – but they appear to be more focused on the ‘real target’.

This means that individuals inclined to ‘pragmatic behaviour’ might either slip into a self-enhancing circle of ever more review activities or else slip into a loop where already low activity is still lowered by the mechanism of motivation. Similarly, from Table 3 (right) it can be concluded that ‘idealistic reviewers’ have a generally lower level of readiness to see or even accept such structural driving factors for their success. Their motivation grounds elsewhere, most likely in ‘the (ethically sound) quality’ of their contribution.

The same structure of deliberations, only for expectations of what will happen to them is shown in Table 4. The logical structure of the left column allows for a positive feedback circle (dynamic), the logical structure of the right column does not (static).

Table 5. Constituents for the two subsets (‘pragmatic’ and ‘idealistic’) of students: what do they depend on?

	<i>pragmatic reviewers</i>	<i>idealistic reviewers</i>
Logical structure	<ul style="list-style-type: none"> • positive feedback circle (<i>dynamic</i>) 	<ul style="list-style-type: none"> • no positive feedback circle (<i>static</i>)
Source of motivation	<ul style="list-style-type: none"> • <i>exogenous</i> 	<ul style="list-style-type: none"> • <i>endogenous</i>

Table 5 finally suggests a more dynamic structure of the ‘motivation engine’ which could explain that ‘non-idealistic but pragmatic’ behaviour is helped by this feedback circle and therefore attains higher activity levels as compared to the instructor’s assessment alone.

An unguided review situation favours motivation oriented towards ‘fulfilling *internal* targets’.

Another conclusion is repeated from above: In general it becomes clearly visible that both functionalities of course design – namely ‘optimizing the pattern of social flow’ and ‘creating a true picture of the students’ competence’ – do not necessarily always act in the same direction; ideally both functionalities should be separated and should complement each other.

7. Conclusions

Two interdisciplinary and intercultural curricula named ‘Global Studies’ (GS) are currently implemented at the University of Graz, in the second largest city in Austria. Since 2004, in over 50 meetings the Steering Committee ‘Global Studies’ as a peer-oriented dialogic and discursive panel has designed their profiles. It was complemented last year by a ‘Curricula Commission Global Studies’ defining the details of the master’s curriculum.

1. One ‘*bundle of electives Global Studies*’ was launched in 2004 and has received 334 enrolments from students until summer 2010, one third of them from the Department of Humanities. A rich interdisciplinary setting is characteristic for the student cohorts populating GS and passing at least two credits from each of six modules (1) Globalisation, Development, Sustainability, Gender – An Introduction, (2) World History, (3) World Economics, (4) World Politics and International Law, (5) World Cultures, World Religions and World Ethics, (6) Organisational and Social Skills.

2. A new ‘*Global Studies master's curriculum*’ was implemented in autumn 2010 amounting to a total of 120 ECTS credits. 29 ECTS of courses from an integrative ‘basic module’ must be taken. These are complemented by free electives from five modules, out of which two must be chosen. Such a curriculum appears presently the best approach to promoting the ideals of interdisciplinarity and interculturality given the severe financial bottlenecks faced by Austrian universities.

The spirit and tacit constitution of ‘Global Studies’ at Graz has always been inclusive, not exclusive. Strategic decisions were based on a broad consensus of Steering Committee members who were dispatched from their departments in order to materialise the views of different scientific cultures, thus creating another instance of an ‘intercultural learning process’.

All the above GS-related initiatives have been implemented using *the learning platform WebCT*.

Experience has shown that this *wide variety of web-based approaches* is able to cover sufficiently well the needed variety of (i) *scientific approaches*, (ii) *didactic procedures* that synthesise opposing world views and integrate antagonistic understandings and (iii) *communicational profiles* that are materialised in the diversity of students’ scientific cultures.

The experiences from the first year of the key interdisciplinary lecture ‘Basics of Global Studies’ suggests that e-learning facilities represent a ‘turbo’ to student learning, especially because of a boost of (web-based) review activities that occur along a guided structure implemented by the author. A peer review system combined with a strict review by the lecturer proved to be the best system for maintaining high academic quality while achieving high density of student-student interaction in this multicultural environment.

References

- AAI 2010.** Afro-Asiatisches Institut Graz. URL: retrieved from <http://www.aai-graz.at/>.
- Ahamer, G. 2007.** *eJournal for Global Studies: GLOSS – Global Studies Survey*, founding concept paper, Karl-Franzens University Graz. URL: http://www.uni-graz.at/globalstudies/deposit/Projektantrag-GLOSS_220507.pdf.
- Ahamer, G. 2010.** Heuristics of social process design. In Lazinica, A. (ed.), *Computational Intelligence & Modern Heuristics* (pp. 265–298). INTECH.
- Ahamer, G. & Jekel, T. 2010.** Make a Change by Exchanging Views. In Mukerji S., and Tripathi, P. (eds.), *Cases on Transnational Learning and Technologically Enabled Environments* (pp. 1–30). IGI Global, Hershey, New York. URL: <http://www.igi-global.com/Bookstore/TitleDetails.aspx?TitleId=37313&DetailsType=Chapters>.
- Ahamer, G., Kumpfmüller, K.A., Hohenwarter, M. 2011.** Web-based exchange of views enhances ‘Global Studies’. *Campus-Wide Information Systems* 28(1): 16–40.
- Ahamer, G. 2011a.** Localize Individuals in Spaces of Interaction – Analysis of Online Review Processes. *International Journal of Computer Science & Emerging Technologies (IJCSET)*, 2(3), June 2011.
- Ahamer, G. 2011b.** IT-supported Interaction Creates Discursive Spaces. *International Journal of Latest Trend in Computing (IJLTC)*, 2(2), June 2011.
- Ahamer, G. 2011c.** Lecture on ‘*Social and Cultural Geography*’. URL: http://www.uni-graz.at/globalstudies/deposit/GS-Basis-LV_Anteil-Gilbert-Ahamer_291210.ppt and <http://www.>

- uni-graz.at/globalstudies/deposit/GS-Basis-LV_Anteil-Gilbert-Ahamer_Skriptum+Ex+Lesestoff.pdf.
- Ahamer, G. 2011d.** How technologies can localize learners in a multicultural space. *International Journal of Technology and Educational Marketing* (IJTEM) 1(2): 1–24.
- Ahamer, G. 2014.** GIS^S and GIS^P Facilitate Higher Education and Cooperative Learning Design. In Mukerji S., and Tripathi P. (eds.), *Handbook of Research on Transnational Higher Education Management* Advances in Higher Education and Professional Development (AHEPD) Book Series, IGI Global Publishers, USA, volume I, chapter 1, pp. 1–21, DOI 10.4018/978-1-4666-4458-8.ch001.
- ANM 2006.** Development of an e-journal GLOSS. URL: <http://gams.uni-graz.at/fedora/get/o:verne-071-1/bdef:TEI/get/>.
- ANM 2010.** Academy for New Media and Technology Transfer at Graz University. URL: retrieved from http://www.uni-graz.at/en/anmwww/anmwww_akademie.htm.
- Annex 1 2010.** Planned ‘Annex 1’ to the GS master curriculum. URL: http://www.uni-graz.at/globalstudies/deposit/GS-Modulbeschreibungen-Anhang-I_070510.doc.
- Archive GS 2010.** Historic Development of the Global Studies Initiative at Graz University. URL: <http://www-classic.uni-graz.at/vre1www/archiv.htm>.
- Basics of Global Studies 2010.** Key lecture of 15 ECTS, GS curriculum. URL: https://online.uni-graz.at/kfu_online/lv.detail?clvnr=269183&cperson_nr=51628&sprache=2
Lecture notes available as: Ahamer, G., Benedek, W. Farmer, K., Höllinger, F. Pippan, C., Schöpfer, G., Teibenbacher, P. Vorbach, S. ‘Skriptum Basisvorlesung Global Studies’. Graz: Institut for Social and Economic History. URL: see <http://www.uni-graz.at/globalstudies/> and http://www.uni-graz.at/globalstudies/deposit/GLOBAL-STUDIES_Folienskriptum_WS-2010-11.pdf.
- Berding, J. W. A. 1999.** John Dewey's participatory philosophy of education – Education. URL: experience and curriculum, <http://members.ziggo.nl/jwa.berding/Summarydiss.htm>.
- Cools, E., Evans, C., Redmond, J.A. 2009.** Using Styles for More Effective Learning in Multicultural and e-learning Environments. *Multicultural Education & Technology Journal* 3(1): 5–16.
- Economides, A.A. 2008.** Culture-aware Collaborative Learning, *Multicultural Education & Technology Journal* 2(4): 243–267.
- EGC 2010.** Research Cluster *Environment and Global Change* at Graz University. URL: http://www.uni-graz.at/ffowww/ffowww_forschung.
- ETC 2010.** European Training and Research Centre for Human Rights and Democracy. URL: <http://www.etc-graz.at/typo3/index.php?id=64>.
- Fischer, K. & Kolland, F. 2009.** Editorial to the 25 year JEP issue. *Journal für Entwicklungspolitik* 25(4): 6–10.
- Freire, P. 1970.** *Pedagogy of the Oppressed*. New York; Seabury Press.
- Global Responsibility 2010.** Austrian Platform for Development and Humanitarian Aid. URL: <http://www.globaleverantwortung.at/start.asp?b=1288>.
- GS 2006.** First official brochure ‘Global Studies’ at Karl-Franzens University Graz. URL: http://www.uni-graz.at/globalstudies/GS-content/GS_Vierseiter.pdf.
- GLOSS 2007.** GLOSS – a joint e-journal initiative of ‘Global Studies’ and the ‘Academy for New Media’ at Graz University. URL: http://www.uni-graz.at/globalstudies/deposit/anmwww_ejournal-globalstudies.pdf.

- GS 2010.** Master curriculum 'Global Studies'. Karl-Franzens University Graz. URL: https://online.uni-graz.at/kfu_online/wbMitteilungsblaetter.display?pNr=186789.
- Hofstede, G. 1980.** *Culture's Consequences*. Beverly Hills, CA: Sage.
- Hofstede, G. H. 2001.** *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*. Thousand Oaks, CA: Sage.
- Hofstede, G. 2010.** *Geert Hofstede Cultural Dimensions*. URL: http://www.geert-hofstede.com/geert_hofstede_resources.shtml.
- Horx, M. 2003.** *Future Fitness*. Frankfurt am Main: Eichborn Verlag.
- IE 2010.** Curricula of International Development (Internationale Entwicklung). URL: <http://www.univie.ac.at/int-entwicklung/>.
- JEP 2010.** Mattersburg Circle for Developmental Policy at Austrian Universities. URL: <http://www.mattersburgerkreis.at/>, see also http://www.pfz.at/?art_id=931.
- KFU 2005.** Strategic Development Plan of Karl-Franzens-Universität Graz. URL: http://www.uni-graz.at/uewww/uewww_entwicklungsplan/uewww_strategischer_wuerfel.htm.
- Kumpfmüller, K.A. 2005.** *Globalisierung: Grundgedanken zu einem widersprüchlichen Phänomen*, Forum of the Burgenland House of Europe, 2(8), December 2005, pp. 18–19. URL: <http://www.ceeol.com/aspx/getdocument.aspx?logid=5&id=775805c7-dc77-4ccf-b15a-b6bd7cbafa07>.
- Kumpfmüller, K. 2007.** *Which targets for Global Studies? – Fundamental deliberations for the inauguration of the master study's curricula commission at Graz University*. Institute for International Law, Memo to the Senate of Karl-Franzens University Graz.
- Kumpfmüller, K.A. 2009.** Concordia versus Pax: The Impact of Eastern Governance for Harmony on Western Peace Concepts, In Tao, J., Cheung, A. B. L., Painter, M., Li, C. (eds.) *Governance for Harmony in Asia and Beyond* (pp. 329–347). URL: <http://www.routledge.com/books/details/9780415470049/>.
- Kumpfmüller, K. 2010.** *Introduction to Global Studies*, Institute of Economic and Social History, over 40 lectures on development held since 1990. URL: https://online.uni-graz.at/kfu_online/lv.person_liste?cperson_nr=54788.
- Malone, T., Wilder, H. 2008.** Chasing ubuntu: Using ICTs to Promote Reflective Practice. *Multicultural Education & Technology Journal* 2(2): 118–125.
- MC 2010.** Mattersburg Circle for Developmental Policy at Austrian Universities. URL: <http://www.mattersburgerkreis.at/>.
- Medidaprix 2007.** Finalists. URL: http://www.medidaprix.org/mdd_2007/dynframeset_006.html. See also URL: <http://www.kfunigraz.ac.at/globalstudies/GS-content/SurfingGlobalChange.pdf>.
- Nentwich, M. 1999.** *Cyberscience: Die Zukunft der Wissenschaft im Zeitalter der Informations- und Kommunikationstechnologien*. MPIfG Working Paper 99/6, Max Planck Institute for the Study of Societies. URL: <http://www.mpi-fg-koeln.mpg.de/pu/workpap/wp99-6/wp99-6.html>.
- Olaniran, B.A., Agnello, M.F. 2005.** Globalization, Educational Hegemony, and Higher Education. *Multicultural Education & Technology Journal* 2(2): 68–86.
- PFC 2010.** Paulo Freire Center for Transdisciplinary Development Research and Dialogical Education. URL: http://www.paulofreirezentrum.at/index.php?art_id=694.

- Preamble GS 2010.** *The Target of Global Studies*, Preamble to the GS curricula at Graz University. URL: <http://www.uni-graz.at/vre1www/vre1www-wfs/vre1www-praeambel.htm>.
- Prensky, M. 2001.** *Digital Game-Based Learning*, Mc-Graw-Hill, New York.
- Tripathi, P. & Mukerji, S. 2008.** Access and Equity to Education in India through Synergy of Conventional and ODL Systems: A Step towards Democratization of Education, IGNOU. URL: <http://www.distanceandaccesstoeducation.org/contents/OP2008-IGNOU.pdf>.
- Rapport, N. & Overing, J. 2000.** *Social and Cultural Anthropology: The Key Concepts*, Routledge, London, NY.
- RCE 2010.** Regional Center of Expertise in Education for Sustainable Development at Graz University. URL: <http://www.uni-graz.at/rce/EN/Ehome.htm>.
- Robertson, C. 2011.** Co-Constructing a Learning Community: A Tool for Developing International Understanding. *International Journal of Technology and Educational Marketing*, 1(1): 39–49.
- SC GS 2010.** Steering Committee Global Studies. URL: <http://www.uni-graz.at/vre1www/vre1www-wfs/vre1www-steering-committee.htm>.
- Schicho, W. 2009.** 25 Jahre Journal für Entwicklungspolitik, *Journal für Entwicklungspolitik*, 25(4): 11–18.
- Schwartz, D. et al., 2003.** Technologies for learning from intercultural reflections. *Intercultural Education* 14(3).
- Sulimma, M. 2006.** Relations between Epistemological Beliefs and Culture Classifications. *Multicultural Education & Technology Journal* 3(1): 74–89.
- Strategy 2010.** Strategy Paper of the Karl-Franzens University. URL: http://www.uni-graz.at/uewww_entwicklungsplan.htm.
- Tibi, B. 2009.** *Euro-Islam*, Darmstadt: Primus. Compare similar content retrievable from <http://www.signandsight.com/features/1258.html> or <http://www.bassamtibi.de/>.
- USW 2011.** Reports from the Interdisciplinary Practicals (IP) in the framework of the curriculum 'Environmental Systems Analysis' (USW). URL: http://www.uni-graz.at/usw1www/usw1www_magazin/usw1www_berichte.htm.
- Wang, V.C.X. 2011.** Marketing Educational Programs through Technology and the Right Philosophies. *International Journal of Technology and Educational Marketing* 1(1): 50–59.
- WegCenter 2010.** Wegener Center for Climate and Global Change at Graz University, retrieved from <http://wegcenter.uni-graz.at/>.
- Woods, P., and Woods, G. 2011.** Lighting the Fires of Entrepreneurialism? Constructions of Meaning in an English Inner City Academy. *International Journal of Technology and Educational Marketing* 1(1): 1–24.

Local Solutions in a Global Environment: Facilitating National Strategies in New Zealand*

Jim Sheffield

How should New Zealand respond to the multiple, intertwined and fast-changing impacts of globalization? What strategies are available to this small South Pacific country and how may these be facilitated? This empirical research frames the facilitation of selected local solutions in a global environment within the theoretical perspective of pluralism and communicative action. The facilitation of aspects of national policies in the domains of science funding, economic development and regional growth is reviewed. Electronic meeting technology was employed. The focus question is: 'Does electronic discourse increase the success of local solutions in a global environment?'

Keywords: New Zealand, local solutions, global environment, pluralism, communicative action, electronic discourse.

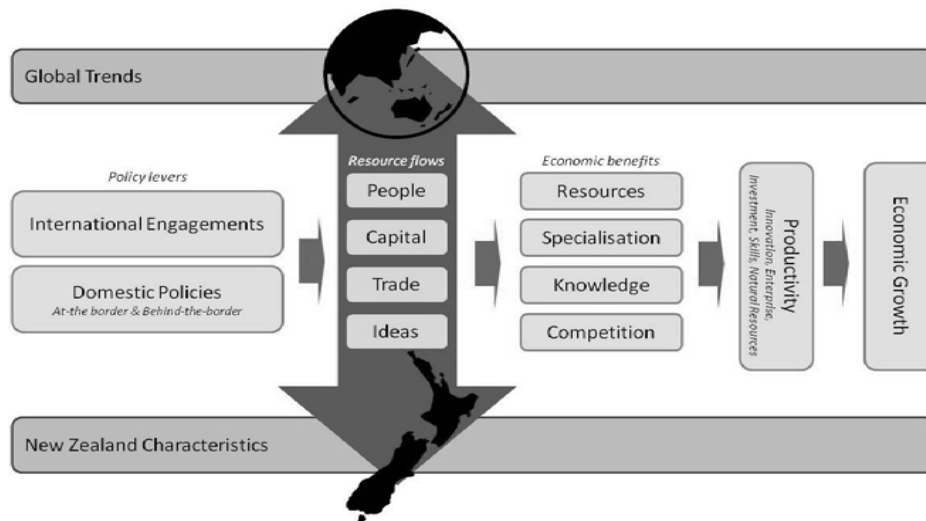
1. A New Zealand Response to Globalization

Productivity isn't everything, but in the long run, it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.

Krugman 1997

Raising productivity is the core economic challenge for New Zealand over the medium term. Small, high-productivity economies rely heavily on international connections – the flows of people, capital, trade and ideas between countries around the world (New Zealand Government 2009). In the current era of globalization, New Zealand's combined lack of any major home market effect, small population and lack of major agglomeration effects, and the extreme geographical isolation, breaks the usual link between entrepreneurship, innovation and growth (McCann 2009). Domestic policy settings in science funding, economic development, and regional planning are critical to making the most of international opportunities. A well-funded science sector encourages entrepreneurial and innovative activity to be located in New Zealand and facilitates international knowledge transfer. Economic development improves competitiveness in global markets, including those in the Asia-Pacific region. Regional planning in Auckland, New Zealand's major growth area, attracts skilled migrants and reduces the loss of New Zealand-born citizens to Australia and other countries (Cheshire 2012) (Fig. 1).

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Fig. 1. Some aspects of a New Zealand response to globalization

Source: New Zealand Government (2009).

This article reviews the facilitation of aspects of national policies in the domains of science funding, economic development and regional planning (Table 1). Electronic meeting technology was employed. The focus question is: ‘Does electronic discourse increase the success of local solutions in a global environment?’ The remainder of the article is structured as follows. Section 2 develops a theoretical framework. Section 3 describes the methodology for gathering empirical evidence. Sections 4–6 review the facilitation cases. Section 7 discusses the findings in the light of the theoretical framework. Section 8, which considers the lessons learned, concludes the article.

Table 1. Facilitating national strategies in New Zealand

<p>Science funding <i>Sponsor:</i> New Zealand Ministry of Research, Science and Technology. <i>Task:</i> Allocation of the US (2012) \$2 Billion Public Good Science Fund across all 40 areas of NZ science. <i>Role/process/group:</i> Design of a 5-day group decision process for a 5-year planning and budgeting period. Implementation of the process with the national Science and Technology Expert Panel. <i>Goal:</i> Legitimacy in science governance. A national consensus on priorities and transparency in funding.</p>
<p>Economic development <i>Sponsor:</i> New Zealand Trade Development Board. <i>Task:</i> To upgrade New Zealand's competitive position in global markets. <i>Role/process/group:</i> Design of 70 industry-wide strategic planning interventions conducted with the assistance of Harvard's Michael Porter. Implementation with 1,000+ industry leaders. <i>Goal:</i> Improved relationships among industry stakeholders and formation of joint action groups</p>

Regional planning

Sponsor: Auckland Regional Council.

Task: Strategic evaluation of long-term plans for the Auckland region, NZ's main growth area.

Role/process/group: Design of a group decision process to close out a 7-year planning cycle. Implementation with representatives of the 7 territorial authorities and the Auckland Regional Council.

Goal: Improved trust and understanding among decision makers. Support for a consensus spatial plan.

2. Theory Development

Facilitating national policies required extensive consultation among a large number of stakeholders in different organizations. The context was pluralistic – the objectives of social actors were divergent and power was diffused (Jarzabkowski and Fenton 2006; Denis *et al.* 2007). A modern information and communication technology – electronic meeting systems – has been found useful in supporting organizational groups engaged in strategic planning activities within an established power structure (Fjermestad and Hiltz 2001; Shaw *et al.* 2003). Yet research on electronic support in the context of pluralism and inter-organizational meetings suggests that the role of electronic meeting systems is unclear. For example, if electronic technology is employed in a meeting sponsored by one organization but attended by members of other organizations, whose interpretation of the ends served by the electronically-supported meeting should determine success? Who is the client? (Ackermann *et al.* 2005.) What roles and responsibilities will be recognized? (Franco 2008) Is it sensible to expect powerful stakeholders to use collaborative technologies when these introduce unwanted accountability and make the exercise of power more difficult? (Schultze and Leidner 2002; Lewis *et al.* 2007) What type of model should drive the facilitation process? (Morton *et al.* 2003.) By what concept(s) of rationality or validity should the facilitator be held accountable for a positive outcome? (Kolfshoten *et al.* 2007) Inter-organizational meetings require the surfacing and testing of assumptions from opposing perspectives (Mitroff and Linstead 1993). *In dialectical terms a pair of opposing perspectives is seen as a Hegelian thesis and antithesis (Millet and Gogan 2006). Ignorance is reduced via active engagement with the conflict and confusion that accompany surfacing and reconciling opposing (multiple or pluralistic) perspectives, and giving birth to a new, more current synthesis.*

Habermas (1984) provides a theory about how claims to pluralistic knowledge should best emerge from the communicative process. In Habermas' theory of communicative action, an ideal speech situation is defined as one in which all participants are free to question any utterance on the basis of its claims to objective truth, rightness for the context, and sincerity of the speaker. The speaker must be open to hearing and rationally responding to the questions that are asked. Power relations, that in other circumstances might allow some participants to ignore the perspectives of others, are set aside in favour of genuine dialogue.

In the theory of communicative action, knowledge is evaluated from three perspectives (Habermas 1984: 100):

- *Personal perspective* ('why I feel, and would be'). The personal or subjective world that is the totality of the experiences to which the speaker or actor has privileged access (because it is the speaker or actor that experienced them). Claims to subjective truth are evaluated in terms of the sincerity of the speaker or actor.
- *Interpersonal perspective* ('what we say, and should be'). The totality of interpersonal relations legitimately regulated by contextual expectations or norms. Claims to interpersonal norms are evaluated in terms of the rightness of the speakers or actors.
- *Technical Perspective* ('how it is, and could be'). The technical world of material fact that is the totality of all entities about which objectively true statements are possible, or could be brought about by purposeful intervention. Claims to facts and technical expertise are evaluated in terms of objective truth.

The ideal speech situation provides a standard of excellence for the reflective communicative action undertaken by two or more stakeholders in order to stabilize mutual understanding. Similarly group decision is considered as a collaborative process that seeks 'rightness' in the fit (coherence) between personal values, interpersonal objectives and technical decision criteria (Shakun 2003). This requires participants to develop and integrate perspectives from generic roles that Churchman terms *system designer* (more technical / task oriented), *decision maker* (more interpersonal / consensus oriented) and *client* (more subjective / value oriented) (Churchman 1971: 200). Five facilitation principles based on pluralism and communicative action are presented in Table 2.

Table 2. Five facilitation principles based on pluralism and communicative action. Adapted from Churchman 1971; Habermas 1984

<p>Principle 1. Personal commitment</p> <p>Express claims to <i>sincerity</i> by free and open disclosure of participants' subjectivity (identity, experience and values).</p> <p>Ensure that participants give voice to their personal commitments and multiple identities and that the periods of silence are provided as an aid to ethical self-reflection.</p> <p>The procedure for evaluating the evidence should be validated by expressing beliefs and aspirations, voices and images ('story telling') that are unconstrained by technical issues and unrestrained by the interpersonal context.</p>
<p>Principle 2. Interpersonal agreement</p> <p>Enact claims to <i>rightness</i> via discussion among all those who are entitled to be represented.</p> <p>Ensure that the discussion addresses the role-based needs of stakeholders.</p> <p>The procedure for evaluating the evidence should be validated by full participation in a debate conducted under the norms of established legitimate interpersonal relationships.</p>
<p>Principle 3. Technical excellence</p> <p>Present claims to <i>objective truth</i> via research evidence.</p> <p>Ensure that the findings by technical experts are examined critically and the findings documented.</p> <p>The procedure for evaluating the evidence should be validated by a willingness to adopt a cognitive, objectivating attitude towards the facts. <i>Listen to the evidence, look at the facts – avoid partisan delusions.</i></p>

Principle 4. Coherence

Assuming that claims for valid personal, interpersonal and technical knowledge have been surfaced, ensure that they are *coherent*. An apparent contradiction (thesis and antithesis) should serve as a precursor to a *Hegelian* synthesis. *Oh my God, I was wrong! We were all wrong!*

The procedure for evaluating coherence should be validated by a willingness to probe the evidence from all three perspectives, to identify strengths and weaknesses in the evidence, and to identify tradeoffs.

Principle 5. Overall Success

Success is conceptualized in *Churchmanian* terms as a meeting of the minds about intertwined relational and task issues that creates the capability of choosing the right means for one's desired ends.

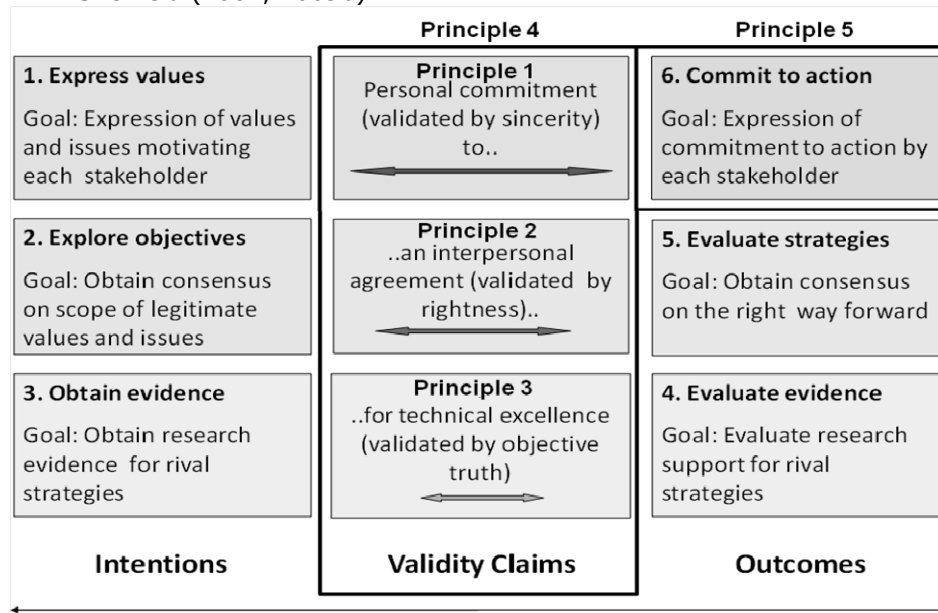
This requires participants to develop and integrate perspectives from generic roles that Churchman terms *system designer* (more technical / task oriented), *decision maker* (more interpersonal / consensus oriented) and *client* (more subjective / value oriented).

More specifically, success is indicated by insight leading to a consensus model that provides decision makers with a rationale for action.

Integration of the Habermasian perspectives on knowledge is an exercise in sense-making (Weick 1979). Themes are detected both prospectively and retrospectively and emerge from communicative acts in a somewhat unpredictable manner. Nevertheless, it is common for discourse on *intentions* to proceed from the personal to the technical, followed by discourse on *outcomes* that proceed from the technical to the personal (Shakun 2003). Each pair of discourses (intention and outcome) in the same knowledge perspective develops mutual understanding via one of the principles in Table 2 and evaluates rationality via the relevant Habermasian knowledge claim (Sheffield 2005). *The standard of excellence for communicative action can be stated as follows: personal commitment (validated by sincerity) to an interpersonal consensus (validated by rightness) for technical excellence (validated by objective truth)*. Each aspect of excellence is associated with Principle 1, 2 or 3, and the collective value of all three principles is evaluated in terms of Principle 4 and Principle 5 (Table 2). In the current research pluralism and electronic discourse are evaluated via qualitative measures of the impact on overall success of the facilitation principles and associated framework (Fig. 2).

Pluralism is a notable feature not only of communicative action but of research in areas as diverse as neuroscience (Lehrer 2009), knowledge management (Sheffield and Guo 2007a, 2007b; Sheffield 2008b), organizational sense-making (Weick 1979; Snowden and Boone 2007) and systemic development (Sheffield 2008a, 2009a; Midgley and Pinzón 2011). Recent advances in neuroscience ground pluralism in the biology of decision behaviour (Lehrer 2009; Sheffield 2012). Various scanning devices reveal that the brain is an argument between neural regions dealing with emotion, morality and reason. *Seen through the perspective of neuroscience the standard of excellence in group decision making becomes the pursuit of success through emotional commitment to a moral agreement for reasoned excellence.*

Fig. 2. A framework for facilitating national strategies in New Zealand based on pluralism and communicative action (Habermas 1984). Adapted from Sheffield (2004, 2009b)



Pluralism can be viewed as a consequence of intertwined relationship and task issues, and intertwined divergent and convergent thinking. The electronic discourse and supporting technology employed in the current research supported pluralism via two key attributes. Firstly, the technology provided a degree of anonymity that reduced the anxiety about surfacing opposing perspectives. This reduced participants' conflict about personal (emotional) commitments and interpersonal (moral) issues. Secondly, the technology reduced confusion by providing automatic recording of all electronic discourse ('group memory'). This enhanced participants' technical (reasoning) capabilities. Together these attributes allowed procedures for idea generation (divergent thinking) to be separated in time from procedures for information analysis (convergent thinking). This in turn enabled a separate focus on interlocked issues about relationships (trust) and cognition (understanding). In the current research all of these concepts are included in the evaluation of satisfaction with electronic discourse (Fig. 3).

Fig. 3. Evaluation of participant's satisfaction with electronic discourse

	Local solutions in a global environment	Procedure
Focus	Divergent	Convergent
Personal and interpersonal knowledge		
Relationship issues		
➤ Reduce conflict	1. Absence of perceived conflict	4. Consensus for cooperative action
➤ Increase trust		
Technical knowledge		
Task issues		
➤ Reduce confusion	2. Participation	3. Information exchange
➤ Increase understanding		

3. Methodology

A multiple case study approach was adopted. The unit of analysis was a meeting (or series of meetings) facilitated by a leader in the domain of either science funding, economic development or regional planning. The facilitator was not part of the research team. The research team consisted of two academics and two assistants. The role of the research team was primarily one of data gathering and analysis. The data gathering techniques that were used included direct observation, interviews with the facilitator and his staff, interviews with meeting participants, analysis of meeting reports and computer files, and a questionnaire that was administered to participants at the end of their meeting.

All meetings were conducted in an electronic meeting facility at the University of Auckland. This facility, called the Decision Support Centre (DSC), consists of a large room containing 20 computers set out on an elongated table. In addition, the DSC contains a set of four large, moveable whiteboards for more traditional methods of recording the group's activities. The purpose of the computer facilities is to run Ventana Corporation's GroupSystems, a text-based electronic meeting support system (Sheffield and Gallupe 1994; Fjermestad and Hiltz 2001; Ackermann *et al.* 2005). GroupSystems supports processes that include the anonymous and simultaneous individual generation of ideas and the prioritization and brief discussion of key findings (Van de Ven and Delbecq 1971). GroupSystems also supports the anonymous and simultaneous individual allocation of budget amounts and the amalgamation and analysis of a group budget (Fig. 4). In the following three sections the facilitation cases are reviewed.

Fig. 4. Electronic meeting technology



Source: Sheffield 1993.

4. Facilitating Science Funding

The clashing point of two subjects, two disciplines, two cultures of two galaxies, so far as that goes ought to produce creative chances.

(Snow 1959: 16)

There was such a huge diversity of people on the panel, from 'pure research' oriented scientists to hard-headed business people, that significant political differences were inevitable. '(Electronic discourse) put the politics in a black box, to be dealt with later'.

(Participant in a science funding meeting)

Bednarek (2011) analyses the strategizing process in New Zealand's science sector. She found that the context was pluralistic – the objectives of social actors were divergent and power was diffused. In this context institutions found legitimacy to be a powerful determinant of success. Legitimacy was found to comprise aspects which included the cognitive, normative/moral/regulative and socio-political. Organizations in New Zealand's science sector were characterized by multiple embedded tensions and complex diffused power structures. The author's analysis demonstrated both the creative potential and challenges in strategizing for legitimacy amidst pluralism.

The facilitation of aspects of science funding starts with the theoretical perspective that objective facts, societal norms, and personal values are intertwined. Objectivism, social constructionism and subjectivism are viewed as emergent perspectives in a broader and more critical discourse. The chief scientist of New Zealand, Sir Peter Gluckman, emphasizes that science is no longer linear, authoritative and definitive, provided only by a domain-specific expert. Rather science is increasingly characterized by complexity, where multiple perspectives on knowledge are required to address the asymmetric payoffs associated with various policy options (Gluckman 2011).

The chief executive of New Zealand's Ministry of Research, Science and Technology (MORST) and staff spent four days in the Decision Support Centre at the University of Auckland (Fig. 4) with the panel appointed to allocate the Public Good Science Fund. The panel distributed US(2012)\$ 2 billion across all 40 areas of New Zealand science. This is by far the largest contestable fund in New Zealand and funding decisions directly or indirectly impact most of the New Zealand economy. The technical (cognitive) issues were complex – each of the twenty panel members had received approximately 1,000 pages of briefing papers. A group memory device would clearly be required to support deliberation. The personal and interpersonal (socio-political) issues were perhaps more difficult to ignore – many of the panel were scientists, and nobody wanted reductions in areas dear to them. The decision process was designed to reduce politics about divergent objectives to a manageable level, so that attention could be directed to the more technical, task-oriented aspects of the decision process.

One member of the panel was the chief executive of the New Zealand Trade Development Board, Rick Christie. He reported that electronic discourse 'tends to be fairer – more objective – it draws on a different range of skills. But there's no question of not being heard – which can be a problem in meetings where there's just verbal interaction... If you are seeking ideas on something not identified with the contributor, then it's a great leveler...' (Sheffield 1993) Another member of the panel was John Butcher, director of the

Forest Research Institute's Wood Technology Division. He reported that there was such a huge diversity of people on the panel, from 'pure research' oriented scientists to hard-headed business people, that significant political differences were inevitable, and that '(electronic discourse) put the politics in a black box, to be dealt with later' (*Ibid.*).

Quantitative evidence on the efficiency and effectiveness of facilitating science funding was obtained via a survey instrument (see Appendix). The instrument was administered to all participants at the end of the final day of the electronically-supported meetings. Participants' satisfaction with electronic discourse averaged 5.9 on a 7 point scale (1 = low satisfaction, 7 = high satisfaction). Participants were satisfied with the focus on personal and interpersonal knowledge and the management of relationship issues – absence of perceived conflict (6.1) and consensus for cooperative action (6.0) received the highest ratings. Participants were also satisfied with the focus on technical knowledge – ratings for participation (5.9) and information exchange (5.8) were also high (Fig. 5).

Fig. 5. Science funding. Participants' satisfaction with electronic discourse averaged 5.9 (1 = Low satisfaction; 7 = High satisfaction)

Science funding Focus	Divergent	Procedure Convergent
Personal and interpersonal knowledge Relationship issues ➤ Reduce conflict ➤ Increase trust	1. Absence of perceived conflict 6.1	4. Consensus for cooperative action 6.0
Technical knowledge Task issues ➤ Reduce confusion ➤ Increase understanding	2. Participation 5.9	3. Information exchange 5.8

5. Facilitating Economic Development

Sheffield and Gallupe (1994, 1995) describe an application of electronic meeting technology to a series of economic policy-making meetings sponsored by the New Zealand Trade Development Board. The meetings were part of a national study aiming to upgrade New Zealand's competitive position in global markets. They were held in Auckland, the main economic region of New Zealand, and were branded 'Advantage Auckland'. The aim of the research was to determine if electronic meeting technology could support an economic development process where participants came from a variety of backgrounds (*e.g.*, business competitors, different ethnic groups) and where meeting urgency and efficiency were of prime importance.

The national study was implemented with the assistance of Harvard's Michael Porter and was framed by his book *The Competitive Advantage of Nations* (Porter 1990). It started with the application of Porter's Diamond Model of industry-based competitiveness to analyze the New Zealand economy and to develop recommendations for improvement. Case studies were completed on 20 economic sectors which in total comprised 85 per cent of New Zealand's exports. The results were published in an influential book entitled *Upgrading New Zealand's Competitive Advantage* (Crocombe *et al.* 1991). It was intended to serve as a basis for positive action by individuals, companies, unions, industry groups, and government. It sought to explain why New Zealand needed:

- a new, more comprehensive economic framework;
- a fundamental re-engineering of attitudes, strategies and institutions;
- systematic upgrading of sources of competitive advantage.

At the time of the study, however, the New Zealand economy was in recession. Most businesses were dependent on the shrinking local market and as a consequence faced severe competition on price and high levels of business failure. Growth in export earnings became the primary goal of government economic policy. Cooperative efforts to upgrade competitive advantage were urgently required – yet were expected to be difficult to arrange.

The Advantage Auckland meetings had four key objectives:

1. to involve a large number of business leaders with a variety of backgrounds in sector and enterprise planning;
2. to assist those who were business competitors to move beyond price competition in local markets and seek opportunities for joint action to upgrade industry competitiveness in world markets;
3. to develop business opportunities for ethnic groups such as Maori who were suffering from high rates of unemployment;
4. to develop a collaborative action plan containing five initiatives that the meeting participants were committed to implement.

The final design of the meetings reflected the assumptions of the research team and facilitator:

- that some participants would require ‘unfreezing’ from their initial viewpoints (Lewin 1947; Schein 1993);
- that anonymous brainstorming on carefully selected topics would build opportunities for collaborative action although brief oral discussions would be required for agreement on key ideas;
- that building commitment to implement the action plans was primarily a social process that could best be supported in a rich communication medium (Daft and Lengel 1986; Sheffield 1995a).

There were five stages in each meeting. The purpose was to obtain working agreement on: meeting objectives, industry competitive advantages and disadvantages, actions to enhance competitive advantage, detailed action plans, and commitment to implementation. Earlier stages featured anonymous brainstorming within a strong organizing structure. In the last two stages, structure was not imposed – it emerged largely from the direct face-to-face interaction of the participants. In these stages the facilitator served primarily as coach and the electronic support served primarily as a memory aid. The design and evaluation of meeting discourse reflected elements of the task (Porter's Diamond Model) and four recommendations for ‘unfreezing’ (Lewin 1947):

- 1) participants feel psychologically safe;
- 2) participants step outside existing cultural norms;
- 3) participants (especially the leaders) learn something new;
- 4) a formal change process is implemented.

A series of 12 meetings were attended by 250 business leaders with a variety of backgrounds (Sheffield and Gallupe 1994). The primary result for each participant from their meeting was a 50- to 80-page bound transcript. Quantitative evidence about meeting effec-

tiveness and participant satisfaction was obtained via a survey instrument administered at the end of each meeting. The results of the questionnaire (see Appendix) indicated that participants felt that the meetings were both very effective and efficient. Answers to questionnaire item 1 indicated that participants felt that if the meetings were held using conventional meeting support, each would have taken three times as long. Average effectiveness (measured via the average of items 3b-24) was 6.1 (1 = Low satisfaction; 7 = High satisfaction). Participants felt that the way the session was run by the facilitator was excellent (6.3) and the technology was very easy and fun to use (6.3).

Participants' satisfaction with electronic discourse was measured via four measures that are numbered so as to match the four recommendations for unfreezing:

- 1) absence of perceived conflict;
- 2) participation;
- 3) information exchange;
- 4) consensus for cooperative action.

As demonstrated in Fig. 6, these measures of the meeting process are conceptually related to procedure (either divergent or convergent) and focus (either relationship or task). For the 12 Advantage Auckland meetings, the average of these four measures was 6.1 (1 = Low satisfaction; 7 = High satisfaction) (Fig. 6).

Fig. 6. Economic development. Participants' satisfaction with electronic discourse averaged 6.1 (1 = Low satisfaction; 7 = High satisfaction)

Economic development Focus	Procedure	
	Divergent	Convergent
Personal and interpersonal knowledge Relationship issues ➤ Reduce conflict ➤ Increase trust	1. Absence of perceived conflict 6.4	4. Consensus for cooperative action 6.2
Technical knowledge Task issues ➤ Reduce confusion ➤ Increase understanding	2. Participation 5.9	3. Information exchange 5.7

Source: Sheffield and Gallupe (1994, 1995).

The follow-up study two years after the meetings revealed that the success of the action plans varied considerably. Some were discontinued within months. Others such as the Marine Exporters Group (Marex) remain in existence and have become central to their industries. The most successful action plans were those in industries where previous meetings had been marked by dysfunctional conflict. Individuals in these meetings collectively possessed resources which, when shared and focused in the absence of perceived conflict, were sufficient to support successful initiatives. Subsequently, further 58 meetings were held in Auckland that were attended by approximately 1,000 business leaders. The Advantage Auckland meetings led directly to the establishment of a group support facility at Victoria University in the capital city of Wellington. The Wellington facility has supported many campaigns, most of which are sponsored by national government, some with the goal of upgrading New Zealand's competitive position in global markets.

6. Facilitating Regional Planning

6.1. Introduction

At the time of this research study, the governance of the Auckland region was characterized by divergent objectives (politics) and diffuse power structures (decentralized governance) (Healey 1997). Planners from seven territorial authorities met on occasion with the planning team from the regional council to develop comprehensive urban growth plans. They negotiated a shared meaning about facts (attributes of Auckland), norms (mutual expectations), and personal commitments (to one's own visions – and how they should be funded). Comprehensive scenarios for rival strategies were iteratively developed and evaluated throughout lengthy planning cycles. The process was complex and politics, confusion, and conflict were accepted as the norm.

Political differences in the Auckland region had been exacerbated by a combination of limited resources and population growth from internal and external migration. The politics around transportation were particularly difficult. Trip times were increasing and transportation costs, which included lost productivity, were increasing. While transportation modelling had been extensively used, issues of governance, funding, and collaborative planning remained. In the absence of a robust and responsive governance structure, deliberations about managing population growth were marked by political differences (Royal Commission on Auckland Governance 2007; New Zealand Council for Infrastructure Development 2008).

Confusion arose from the limited role of a single decision maker and the complexity of the substantive factual issues. For example, multiple organizations were involved in transportation governance – their roles were specialized and included control, participation, planning, funding, and operation/management. While each organization managed *part* of the transport system, none was responsible for the system as a whole. Region-wide or comprehensive urban planning necessitated a critical evaluation of conflicting claims about intertwined criteria related to transportation, housing, workplaces, amenities, *etc.*, by individuals primarily situated within organizations with divergent objectives. To a greater or lesser extent, all social actors suffered from confusion.

Conflict arose from the complexity of the power relationships among decision makers. Local Government legislation conferred powers on the regional council to plan for the region 'in consultation with' territorial authorities. Each authority maintained a planning office responsible to its own council. Each was empowered to serve its own constituency and expected the comprehensive urban plan to serve its own interest. To a greater or lesser extent, all social actors were embroiled in power conflicts.

In Table 2 overall success required participants to develop and integrate perspectives from generic roles that Churchman terms system designer (more technical / task oriented), decision maker (more interpersonal / consensus oriented) and client (more subjective / value oriented). In the regional planning meeting, each participant was primarily a designer of an urban area for which the elected council was the decision maker, and those who lived in the area were clients (Churchman 1971: 200).

The current research explores the practical value of electronic discourse in regional governance and comprehensive urban planning (see Tables 1 and 2, Fig. 2). Because of the complexity of the issues, and the importance of power relations, and the emergent nature of their interactions, and the historical context a non-positivist method of inquiry was adopted. The aim was to describe the general nature of the phenomena observed and to

interpret actions, events, and consequences. The evolution of quality measures (validity claims) during the pre-meeting, meeting, and post-meeting phases of decision making was observed. Data was gathered before, during, and after an electronically-supported meeting.

The purpose of the facilitated electronically-supported meeting was the strategic evaluation of a comprehensive 30-year plan for the Auckland region. This plan, known as the Auckland Strategic Planning Model, had been constructed over a seven-year period. The plan described two strategies for an increase in population from 1 to 1.5 million. Consolidation drove strategy one. More controls, particularly environmental controls, would be imposed to limit the spread of population into rural areas. The result would be higher population density and increased use of passenger transportation (buses, light rail). Expansion drove strategy two. Planning controls would be relaxed, allowing the spread of population into rural areas. The result would be lower population density and increased use of private transport (cars, freeways) (Sheffield 2009b).

In summary regional planning in Auckland, New Zealand was subject to political differences, confusion, and conflict. Regional planning was informed not by a search for a purely technical solution but by communication within a diffuse power structure about divergent objectives. *Interorganizational planning meetings were the exercise of technical skills on behalf of constituencies with a history of conflict, confusion, and the exercise of power.* An open dialogue across planning organizations was required to resolve contradictions among competing perspectives. Facilitating such a dialogue presents conceptual and practical difficulties that motivated the research reviewed below.

6.2. Before the meeting

The evidence gathered in the pre-meeting phase revealed that the 16 participants in the electronically supported regional planning meeting were there to represent seven territorial authorities (four cities and three districts) and the Auckland Regional Council (ARC). Each was a professional planner responsible for advising his/her own (elected) council. Each territorial authority constituted one part of the whole of the Auckland region. The issues associated with embedding 'one part' of an urban region in 'the whole' were complex. The chief planner for the ARC advised that most participants had been involved in prior consultations marked to some degree by politics, confusion, and conflict. Participants recognized the difficulties in achieving the goals of their respective councils and engaging in consultations about comprehensive region-wide plans with planners from other councils. Perceptions of costs and benefits varied with the allegiance of the participant and the history of his or her interactions. As the day of the focal electronically-supported meeting approached, it became apparent that considerable difficulties were being experienced by ARC planners, and that these were directly related to unresolved technical, interpersonal and personal issues.

Technical perspective. Technical difficulties were encountered in discovering an analytically sound method of combining knowledge from the acknowledged experts. Urban planning is a pluralistic area that Banville and Landry (1989) would describe as 'lacking conceptual integration'. For example, traffic engineers focused on access and transportation and developed estimates of trip times under each strategy. Biologists studied coastal water quality and developed estimates of pollutants in parts per million. Financial analysts focusing on economic values developed quantitative estimates of costs. Other planning consultants developed qualitative assessments of amenity, landscape values and housing choice. Scientific methods were applied by the experts who developed submodels in sub-

disciplines embedded within urban planning. *Yet, measures such as trip times, pollutants and implementation costs were, by themselves, conceptually unrelated and could not rigorously be compared.* Claims to objective truth were diminished by the lack of an analytically sound method of combining knowledge from different subspecialties.

Interpersonal perspective. The traditional urban planning triple-bottom-line categories of economic, social and environmental concerns appeared to be interlinked in a way that made the separate evaluation of any one category or subcategory impossible. It became clear that there were complex, dynamic and recursive ('chicken and egg') or self-referential (Müller *et al.* 2005) interdependencies among stakeholder's beliefs, potentially right strategies and available objective facts. These emergent properties of regional planning could only be resolved by discourse.

Personal perspective. The third set of problems was associated with personal commitments. Planners from one major territorial authority (a city of 300,000) were reluctant to attend because they were committed to a city plan based on presuppositions that differed from those of the regional council.

Summary. Analysis from the perspective of pluralism and communicative action (Table 2, Fig. 2) provides qualitative evidence suggesting that the observed levels of guarantors (objective truth, rightness and sincerity) immediately before the focal electronically-supported meeting were low.

6.3. During the meeting

To evaluate rival strategies for the Auckland region, the facilitator of the focal electronically-supported meeting chose to apply the five facilitation principles (Table 2) and framework (Fig. 2). The first part of the meeting focused on the expression of concerns and issues motivating each stakeholder. The last part of the meeting focused on expressions of degrees of commitment to action, for and against, rival strategies. More than half of the agenda items were devoted to electronically-supported discourse about a decision matrix. Two strategies (columns) were evaluated against five classes of criteria (rows) – cost, amenity and landscape, housing choice, access and transportation, and water quality. Each row of the decision matrix was the subject of a 50-minute session that included the anonymous individual generation of ideas and the prioritization and brief discussion of key findings (Sheffield 2004). This 50-minute session included the private ordering by each participant of his or her preference for each strategy (Dias and Climaco 2005). In the following subsections evidence is presented about participant satisfaction with electronic discourse and claims to emergent personal, interpersonal and technical knowledge.

Participant satisfaction with electronic discourse. Participants' satisfaction with electronic discourse averaged 6.0 on a 7 point scale (1 = low satisfaction; 7 = high satisfaction) (Fig. 7). Participants (some of whom were initially unwilling to attend the meeting) were particularly satisfied with participation (6.2) and the management of relationship issues – absence of perceived conflict (6.1) and consensus for cooperative action (6.1) also received high ratings. The relatively lower rating for information exchange (5.5) reflects most participants' familiarity with the issues. Unstructured comments were collected anonymously from participants by means of the GroupSystems software. The responses were overwhelmingly positive. Participants remarked that the meeting generated intense participation, goodwill and momentum. Many people expressed surprise that the technology existed and stated that the meeting outcomes would not have been possible without electronic support.

Fig. 7. Regional planning. Participants' satisfaction with electronic discourse averaged 6.0 (1 = Low satisfaction; 7 = High satisfaction)

Regional planning Focus	Divergent	Procedure Convergent
Personal and interpersonal knowledge Relationship issues ➤ Reduce conflict ➤ Increase trust	1. Absence of perceived conflict 6.1	4. Consensus for cooperative action 6.1
Technical knowledge Task issues ➤ Reduce confusion ➤ Increase understanding	2. Participation 6.2	3. Information exchange 5.5

Source: Sheffield (2004, 2009b).

Evaluation of claims to objective truth. Through the use of the electronic meetings technology participants produced ten pages of text on each of the five criteria (Sheffield 2004). This text or 'frozen discourse' includes key issues that were prioritized via a weighted voting procedure (Van de Ven and Delbecq 1971). Participants cast a total of 240 votes for each criterion. *The key issues were expressed in a manner that was exploratory rather than evaluative. For example, the issue of the extent to which population density must increase to make public transportation sufficiently viable is central to the choice between strategy one (consolidation) and strategy two (expansion). Yet, at the end of a seven-year planning exercise that included extensive traffic modeling, the issue was raised as a question rather than as the evaluation of a factual proposition supported by expert analysis.* This supports the conclusion that under the norms of a cognitive, objectivating attitude towards the facts, the 'truth' was that neither strategy was superior.

Evaluation of claims to rightness. At the end of the discourse on a criterion, each participant privately recorded how well each strategy performed against the five criteria in Table 1. This enabled participants to interpret technical findings from the perspective of their own organization's norms and values. Each of the 16 participants anonymously rated the two strategies on each of the 5 criterion. The aggregated ratings for each strategy and criterion were made accessible to each participant. On one criterion (housing choice), strategy one and strategy two were rated equally. On the remaining four criteria (cost, amenity and landscape, access and transportation, and water quality) strategy one performed distinctly better than strategy two. The strategies and criteria had been developed through a consultative process over a seven-year period. This supports the conclusion that under the norms of established legitimate interpersonal relationships, strategy one is more 'right' than strategy two.

Evaluation of claims to sincerity. Electronic meeting technology supported sharing personal visions prompted by the question 'What is it like to live in Auckland under strategies 1 and 2?' From the perspective of Churchman's inquiring system, participants were asked to drop their usual role of designer and adopt the role of client (Churchman 1971: 200). The goal was disclosure of speaker's subjectivity, unconstrained by the (technical) structure of the model and unrestrained by the interpersonal context. The strategy was to get each individual to: (a) write a personalized account of what it would be like to live in Auckland 30 years hence under each of strategies 1 and 2; (b) read the accounts of others

to identify the most valuable visions. The procedure was a 60-minute silent envisioning exercise in which each account was identified only by a code. Anonymity was almost complete. The most valued visions of what it would be like to live in Auckland 30 years hence showed intense personal support for strategy one, and a willingness to work against strategy two. This supports the conclusion that under the norms of disclosure of speakers' subjectivity, 14 of the 16 participants would, in all sincerity, only have supported strategy one.

Summary. The positive results obtained from the meeting are in strong contrast to the confusion and conflict that existed at the end of the pre-meeting phase. While some participants had been reluctant to attend the focal meeting, and expressed negative views at the beginning of the meeting, all participants provided positive evaluations at the end of the meeting. The functionality of the electronic meeting technology was supportive of an overall positive result. Participation by all participants was intense. By the end of the meeting, electronic discourse produced 80 pages of text. Intense participation in electronic discourse resulted in extensive documentation of claims to objective truth, rightness, and sincerity. The data gathered during the focal meeting support the claim that electronic discourse had successfully reduced conflict and confusion. It is not clear, however, that the decision outcomes integrated the technical, interpersonal, and personal perspectives into a consensus model that provided a rationale for action.

6.4. After the meeting

We have yet to consider the degree of coherence among the three perspectives. Participants found no difference between the strategies on the basis of technical knowledge. Moderate claims in favour of strategy one were made based on interpersonal knowledge. Strong claims in favour of strategy one were made based on personal knowledge.

The degree of coherence among the decision outcomes at different levels was poor. There was a major discrepancy in preferences at various stages of the decision process. The 80-page report generated by electronic meeting technology (from which the findings were extracted) was circulated to all participants immediately after the meeting. *The introductory section of the report highlighted the fact that the participants were strongly supportive of a strategy that lacked factual support.* The report became subject to intense scrutiny. Regional planners repeatedly met among themselves about the report and consulted other meeting participants. Support grew for the interpretation that the strategic options were not extreme enough. In Hegelian terms, the dialectical logic (synthesis) of this interpretation was initially lost on the regional planners because they were so firmly wedded to their decision framework (thesis) that they experienced profound difficulty in recognizing that the framework was flawed (antithesis). An abbreviated planning round was subsequently undertaken with more extreme versions of strategies one and two (based on a hundred percent increase in population). Support that integrated the technical, interpersonal and personal levels of the facilitation framework was then found for strategy one.

6.5. Summary of findings

The results showed that the pre-meeting phase was fraught with technical, interpersonal and personal problems. Both the observations during the meeting and the satisfaction reported by participants (Fig. 7) demonstrated that the facilitated electronically-supported meeting had increased participant's trust and understanding. During the meeting participants found no difference between the strategies on the basis of technical knowledge, a moderate preference for scenario one on the basis of interpersonal knowledge, and a strong

preference for scenario one on the basis of personal knowledge. Reflection after the meeting produced sudden insights that dissolved the perceived lack of coherence. The final analysis integrated technical, interpersonal, and personal perspectives into a consensus model that provided a rationale for action. Empirical evidence was therefore found for the importance of the facilitation framework (Fig. 2) and all five principles (Table 2).

7. Discussion

The meeting made it easy to lay your thoughts out without putting your neck on the line.
(Participant in an economic development meeting)

The current research described local solutions implemented as part of New Zealand response to impacts of globalization. Inter-organizational meetings were conducted in the domains of science funding, economic development and regional planning. The importance of pluralism and electronic discourse to the successful facilitation of these meetings was evaluated via quantitative and qualitative measures. Evidence from the quantitative measures indicated that participants found the meetings very efficient and effective and were very satisfied with electronic discourse. Averages across all three cases are reported in Fig. 8. Evidence from the qualitative measures indicated that the facilitation principles (Table 2) and framework (Fig. 2) were closely associated with overall success. These findings are briefly discussed.

Fig. 8. All three cases. Participants' satisfaction with electronic discourse averaged 6.0 (1 = Low satisfaction; 7 = High satisfaction)

All three cases Focus	Divergent	Procedure Convergent
Personal and interpersonal knowledge Relationship issues ➤ Reduce conflict ➤ Increase trust	1. Absence of perceived conflict 6.2	4. Consensus for cooperative action 6.1
Technical knowledge Task issues ➤ Reduce confusion ➤ Increase understanding	2. Participation 6.0	3. Information exchange 5.7

The strategies implemented were developed in inter-organizational meetings attended by a large number of stakeholders with divergent objectives. Since each participant was very busy meeting the demands of their own organization it was imperative that the inter-organizational meetings were efficient and effective. In traditional inter-organizational meetings, even when participants desire to work in a relatively democratic way, the limited airtime creates conflict. In a one-hour meeting of 15 people, each must compete to get more than four minutes of airtime. Quite literally it is the sender not the message that is visible. Critical analysis invites interpersonal conflict. But in an electronic meeting all participants can input and read information at the same time (Sheffield 1995b).

As everyone can 'talk' at once and still be heard, the work was completed two to three times faster. Because it was difficult to identify who has proposed a particular idea, rank and personality differences among participants were less pronounced. Advocacy, coali-

tions and infighting were less necessary. According to participants, facilitated electronically-supported meetings provided an efficient and effective method of generating informed consensus for action (Fig. 8).

The quantitative evidence indicated that participants were particularly satisfied with the focus on personal and interpersonal knowledge and the management of relationship issues – across all three cases absence of perceived conflict (6.2) and consensus for cooperative action (6.1) received the highest ratings. Participants were also satisfied with the focus on technical knowledge – ratings for participation (6.0) and information exchange (5.7) were also high. This suggests that the anonymity provided by electronic meeting technology was perceived as more important than the raw power associated with the simultaneous use of keyboards. This was particularly apparent in the economic development meetings.

In the 12 Advantage Auckland economic development meetings the absence of perceived conflict (6.4) and consensus for cooperative action (6.2) received the highest ratings. The electronically supported meetings were held when the economy was in recession. Because the level of pain was high and some participants were business competitors, the potential for conflict was high. In many industry sectors diminished disposable income and deregulation had led to oversupply, competition on price, heavy discounting, and persistent infighting. Participants indicated that the meeting created a dialogue, and the exchange of valuable information fostered openness and trust. Interviews conducted one to two years afterwards as part of a follow-up study (Sheffield and Gallupe 1995) confirmed that the meetings had been a catalyst for industry wide change. Participants commented that the anonymous and simultaneous use of the keyboards aided creativity and allowed everybody's comments to be treated fairly.

‘Our ideas were stimulated, shared and focused’.

‘Domination by individuals whose solutions were not of great quality had often destroyed meetings in the past. Anonymity was essential to get rid of personality clashes. The (electronically-supported) meeting was memorable for the variety of participants, its quietness and structure – nobody dominated. It delivered an action plan that was solid enough to cope with the infighting’.

‘Before the meeting a lot of us didn't believe in talking to the opposition. There's a lot more talking together, pulling together now’.

‘The meeting was definitely the catalyst. Absolutely! Why? Because the computer medium allowed people to feel that their contributions were being treated fairly’.

‘The meeting made it easy to lay your thoughts out without putting your neck on the line’.

Empirical support was found for the facilitation framework and all five principles (Table 2, Fig. 2). This suggests that, in facilitating local solutions in a global environment, the benefits of electronic discourse are three-fold:

Technical perspective. Electronic discourse provided support for the development and documentation of validity claims about objective truth, rightness and sincerity, and the degree of coherence among them.

Interpersonal perspective. Electronic discourse provided support for discourse that interweaves evidence (experience and reflection, decision and action, theory and practice, individual feeling and objective fact) from multiple, intertwined, conflicting yet mutually supportive evaluative frames.

Personal perspective. Electronic discourse provided support for the 'psychological safety' and 'trust' needed for direct and unreserved expressions of multiple, conflicting individual perspectives.

In totality, the empirical evidence enables the focus question 'Does electronic discourse increase the success of local solutions in a global environment?' to be answered in the affirmative.

8. Conclusion

Several lessons have been learnt. Firstly, facilitating local solutions in a global environment was a pluralistic endeavour – the objectives of social actors were divergent and power was diffused. Often the goal was a legitimate consensus among diverse stakeholders so that scarce resources could be combined / leveraged for national advantage. Secondly, the theoretical perspective of communicative action was useful in separating out intertwined but quite different types of knowledge. The standard of excellence in communicative action can be stated as follows: personal commitment (validated by sincerity) to an interpersonal consensus (validated by rightness) for technical excellence (validated by objective truth). Thirdly, individual and institutional knowledge was inherently mediated and situated, provisional and pragmatic, aspirational and contested. In an environment of diffuse power relationships, inter-organizational meetings were essential in gaining legitimacy. Fourthly, electronic meeting technology has a raw power that leads to efficient and effective inter-organizational meetings. Excellent performance was observed in the application of electronic meeting technology in science funding, economic development, and regional planning meetings. Fifthly, the findings reported in the current research suggested that the facilitation principles and framework developed in this article may be routinely applied in various other domains. Seen from a Hegelian perspective, the power of pluralism and communicative action lies not in achievement of enlightenment, but in appreciation of the nature of three types of ignorance and the practical consequences of belief.

References

- Ackermann, F., Franco, L. A., Gallupe, B., and Parent, M. 2005. GSS for Multi-Organizational Collaboration: Reflections on Process and Content. *Group Decision and Negotiation* 14(4): 307–331.
- Banville, C., and Landry, M. 1989. Can the Field of MIS be Disciplined? *Communications of the ACM* 32(1): 48–60.
- Bednarek, R. S. 2011. *Strategizing for Legitimacy in Pluralistic Contexts: New Zealand's Science Sector*. Unpublished PhD. Wellington: Victoria University.
- Cheshire, P. 2012. *Cities: The Need to Understand Better Before We Mess with them*. Presentation, December 14. New Zealand Government – Auckland Policy Office.
- Churchman, C. W. 1971. *The Design of Inquiring Systems*. New York: Basic Books.
- Crocombe, G. T., Enright, M. J., and Porter, M. E. 1991. *Upgrading New Zealand's Competitive Advantage*. Auckland: Oxford University Press.

- Daft, R. L., and Lengel, R. H. 1986.** Organizational Information Requirements, Media Richness and Structural Design. *Management Science* 32(5): 554–571.
- Denis, J., Langley, A., and Rouleau, L. 2007.** Strategizing in Pluralistic Contexts: Rethinking Theoretical Frames. *Human Relations* 60(1): 179–215.
- Dias, L., and Climaco, J. 2005.** Dealing with Imprecise Information in Group Multicriteria Decisions: A Methodology and a GDSS Architecture. *European Journal of Operational Research* 160(2): 291–307.
- Fjermestad, J., and Hiltz, S. R. 2001.** Group Support Systems: A Descriptive Evaluation of Case and Field Studies. *Journal of Management Information Systems* 17(3): 115–159.
- Franco, L. A. 2008.** Facilitating Collaboration with Problem Structuring Methods: A Case Study of an Interorganizational Construction Partnership. *Group Decision and Negotiation* 17(4): 267–286.
- Gluckman, P. 2011.** Towards Better Use of Evidence in Policy Formation. A discussion paper. Office of the Prime Minister's Science Advisory Committee. URL: <http://www.pmcsc.org.nz/publications/>.
- Habermas, J. 1984.** *The Theory of Communicative Action*. Vol. 1. Reason and the Rationalization of Society. Boston: Beacon Press.
- Healey, P. 1997.** *Collaborative Planning: Shaping Places in Fragmented Societies*. New York: Palgrave.
- Jarzabkowski, P., and Fenton, E. 2006.** Strategizing and Organizing in Pluralistic Contexts. *Long Range Planning* 39: 631–648.
- Kolfschoten, G. L., Den Hengst-Bruggeling, M., and De Vreede, G. J. 2007.** Issues in the Design of Facilitated Collaboration Processes. *Group Decision and Negotiation* 16(4): 347–361.
- Krugman, P. 1997.** *The Age Of Diminished Expectations*. 3rd ed. Boston: The MIT Press.
- Lehrer, J. 2009.** *The Decisive Moment: How the Brain Makes Up Its Mind*. Melbourne: The Text Publishing Company.
- Lewin, K. 1947.** Frontiers of Group Dynamics: Concept, Method and Reality in Social Science. *Human Relations* 1(11): 5–41.
- Lewis, F. L., Bajwa, D. S., Pervan, G., King, V. L. K., and Munkvold, B. E. 2007.** A Cross-Regional Exploration of Barriers to the Adoption and Use of Electronic Meeting Systems. *Group Decision and Negotiation* 16(4): 381–398.
- McCann, P. 2009.** Economic Geography, Globalization, and New Zealand's Productivity Paradox. *New Zealand Economic Papers* 43(3): 279–314.
- Midgley, G., and Pinzón, L. A. 2011.** Boundary Critique and Its Implications for Conflict Prevention. *Journal of the Operational Research Society* 62: 1543–1554.
- Millet, I., and Gogan, J. 2006.** A Dialectical Framework for Problem Structuring and Information Technology. *Journal of the Operational Research Society* 57: 434–442.
- Mitroff, I. I., and Linstone, H. A. 1993.** *The Unbounded Mind: Breaking the Chains of Traditional Business Thinking*. New York: Oxford University Press.
- Morton, A., Ackermann, F., and Belton, V. 2003.** Technology Driven and Model Driven Approaches to Group Decision Support: Focus, Research Philosophy and Key Concepts. *European Journal of Information Systems* 12(2): 110–126.

- Müller, D. B., Tjallingii, S. P., and Cantor, K. J. 2005. A Transdisciplinary Learning Approach to Foster Convergence of Design, Science and Deliberation in Urban and Regional Planning. *Systems Research and Behavioral Science* 22(3): 193–209.
- New Zealand Council for Infrastructure Development. 2008. Strengthening Auckland Governance, a Submission to the Royal Commission on Auckland Governance.
- New Zealand Government. 2009. International Connections and Productivity: Making Globalization Work for New Zealand. *New Zealand Treasury Productivity Paper* 09/01.
- Porter, M. E. 1990. *The Competitive Advantage of Nations*. New York: The Free Press.
- Royal Commission on Auckland Governance. 2007. URL: <http://www.royalcommission.govt.nz>.
- Schein, E. H. 1993. How Can Organizations Learn Faster? The Challenge of Entering the Green Room. *Sloan Management Review*, Winter: 85–93.
- Schultze, U., and Leidner, D. E. 2002. Studying Knowledge Management in Information Systems Research: Discourses and Theoretical Assumptions. *MIS Quarterly* 26(3): 213–242.
- Shakun, M. F. 2003. Right Problem Solving: Doing the Right Thing Right. *Group Decision and Negotiation* 12(6): 463–476.
- Shaw, D., Ackermann, F., and Eden, C. 2003. Approaches to Sharing Knowledge in Group Problem Structuring. *Journal of the Operational Research Society* 54(9): 936–948.
- Sheffield, J. 1993. Silent Decision Making. *The University of Auckland Alumni News* 3(1): 16–17.
- Sheffield, J. 1995a. The Effect of Communication Medium on Negotiation Performance. *Group Decision and Negotiation* 4(2): 159–179.
- Sheffield, J. 1995b. Using Electronic Meeting Technologies. *People and Performance* 3(3): 18–21.
- Sheffield, J. 2004. The Design of GSS-enabled Interventions: A Habermasian Perspective. *Group Decision and Negotiation* 13(5): 415–436.
- Sheffield, J. 2005. Systemic Knowledge and the V-model. *International Journal of Business Information Systems* 1(1/2): 83–101.
- Sheffield, J. 2008a. Does Health Care for Systemic Development? *Systems Research and Behavioral Science* 25(2): 283–290.
- Sheffield, J. 2008b. Inquiry in Health Knowledge Management. *Journal of Knowledge Management* 12(4): 160–172.
- Sheffield, J. 2009a. *Systemic Development: Local Solutions in a Global Environment*. Good-year, Arizona: ISCE Publishing.
- Sheffield, J. 2009b. *Towards a Design Theory for Collaborative Technologies: Habermasian Analysis of Comprehensive Urban Planning*, *Proceedings of the 42nd Annual Hawaii International Conference on System Sciences*, 5th – 8th January. IEEE Computer Society Press.
- Sheffield, J. 2012. *My Decisive Moment*. Auckland: Pagination Publishers.
- Sheffield, J., and Gallupe, B. 1994. Using Electronic Meeting Technology to Support Economic Policy Development in New Zealand: Short Term Results. *Journal of Management Information Systems* (Winter) 10(3): 97–116.

- Sheffield, J., and Gallupe, B. 1995.** Using Group Support Systems to Improve the New Zealand Economy. Part II. Follow-up Results. *Journal of Management Information Systems* 11(3): 135–153.
- Sheffield, J., and Guo, Z. 2007a.** Critical Heuristics: A Contribution to Addressing the Vexed Question of So-called Knowledge Management. *Systems Research and Behavioral Science* 24(6): 613–626.
- Sheffield, J., and Guo, Z. 2007b.** Ethical Inquiry in Knowledge Management. *International Journal of Applied Systemic Studies* 1(1): 68–81.
- Snow, C. P. 1959.** *The Two Cultures*. London: Cambridge University Press.
- Snowden, D. J., and Boone, M. 2007.** A Leader's Framework for Decision Making. *Harvard Business Review* 85(11): 69–76.
- Van de Ven, A. H., and Delbecq, A. L. 1971.** The Effectiveness of Nominal, Delphi, and Interacting Group Decision Making Processes. *Academy of Management Journal* 17: 605–621.
- Weick, K. E. 1979.** *The Social Psychology of Organizing*. New York: Random House.

Appendix

Session Evaluation Questionnaire*

Decision Support Centre session for _____ (group) on _____ (date)

*Efficiency (Q1-2), effectiveness (Q3a-5), facilitator (Q6-7), technology (Q8-11), reduced barriers to communication (Q12-14), participation (Q15-17), information exchange (Q18-21), meeting outcomes (Q22-24).

Directions: Your opinions are important to us! Please take the time to answer the questions on the front of this sheet. We will use your responses to this questionnaire to upgrade future workshops in the Decision Support Centre. Thank you! Jim Sheffield, Research Director, Decision Support Centre.

1. You spent _____ hours in the Decision Support Centre to achieve this result. How many hours would you expect to spend to achieve the same result by conventional means? _____ hours

2. Using conventional means the process would most likely have spread over _____ days

3a. In the next three months I expect to use/study the report of this session for a total of _____ hours

For questions 3b through 24 indicate your level of agreement with the statement using the following scheme:

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly Disagree	Mostly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Mostly Agree	Strongly Agree

All questions are answered by circling a number. There are no right or wrong answers.

3b. Overall, I thought the workshop was excellent: 1 2 3 4 5 6 7

4. I enjoyed being a member of this group: 1 2 3 4 5 6 7

5. The report containing all contributions to this session will be highly valuable: 1 2 3 4 5 6 7

6. The way the session was run by the facilitator was excellent: 1 2 3 4 5 6 7

7. The facilitator's use of the whiteboards was highly effective: 1 2 3 4 5 6 7

8. The computer facilities were easy to use: 1 2 3 4 5 6 7

9. The computer facilities were highly effective: 1 2 3 4 5 6 7

10. Typing enabled me to focus and refine my ideas before going public: 1 2 3 4 5 6 7

11. The Decision Support Centre technology is fun to use: 1 2 3 4 5 6 7

12. Internal politics were largely absent from today's meeting: 1 2 3 4 5 6 7

13. The rank of participants did not inhibit the free flow of ideas: 1 2 3 4 5 6 7

14. The personality of participants did not inhibit the free flow of ideas: 1 2 3 4 5 6 7

15. I felt actively involved throughout the session: 1 2 3 4 5 6 7

16. All group members participated equally: 1 2 3 4 5 6 7

17. Participants, both as individuals and as a group, were creative: 1 2 3 4 5 6 7

18. I was willing to give valuable information to others in the group: 1 2 3 4 5 6 7
19. I was able to give valuable information to others in the group: 1 2 3 4 5 6 7
20. I received valuable ideas from others on issues of significance to me: 1 2 3 4 5 6 7
21. I received support from others on issues of significance to me: 1 2 3 4 5 6 7
22. The issues surfaced during the brainstorming are important: 1 2 3 4 5 6 7
- 22b. I strongly recommend that this and similar groups use the Decision Support Centre for future planning tasks: 1 2 3 4 5 6 7
23. The summary of key issues developed on the whiteboards is important: 1 2 3 4 5 6 7
24. Participants, both as individuals and as a group, were productive: 1 2 3 4 5 6 7
- Quotable comment. Please quote me on the following comment:

Please use the back of the sheet for further comments.

Evolutionary Globalistics

Ilya V. Ilyin and Arkadi D. Ursul

The analysis of global processes (including globalization and global problems) with relation to evolutionary aspects seems an important step towards understanding their essence and full subject matter as well as revealing their interconnection and interaction with other global processes. We consider the possible development of Evolutionary Globalistics (one of the fields of Global Studies in all their aspects) as a new stage of formation of global knowledge. It is most probable that, at the first stage of its development, Evolutionary Globalistics will evolve as one of the branches of Globalistics alongside with other fields of Global Studies. However, as the necessity of using the evolutionary approach in Global Studies is recognized, this sphere will be filled with ideas of development and it is quite probable that a new, evolutionary stage of global knowledge will start.

Keywords: *Global Studies, evolutionary processes, evolutionism, global problems, Globalistics, Evolutionary Globalistics.*

Several years ago the authors of the present article introduced a new notion of 'Evolutionary Globalistics' into the object field of Global Studies.

Any global crisis, including the natural one, represents a dangerous decrease in the stability of a certain global process or in the self-preservation of a system under the influence of external and internal negative factors and conditions, which can undermine the process or destabilize the system and lead to the global catastrophe. The issues of crises are extensively discussed in terms of the global economic crisis and also in a wider, universal and evolutionary sense. Moreover, a new field of knowledge, devoted to the analysis of different kinds of global catastrophes and possible threats to the humanity, is currently developed. Also the scholars analyze global catastrophes of cosmic, planetary and anthropogenic nature and their possible combinations as well as assess their influence on the future existence of the humanity on Earth. Basing on certain data derived from natural history sciences, some scholars suggest that the humankind may soon get extinct due to the effects of evolutionary processes.

Global problems represent a concentration of negative consequences of the preceding phases of world development and the exacerbation of contradictions that can lead to global crisis and catastrophic consequences. In order to overcome the crisis caused by global problems and negative processes on a global scale, the humanity should undertake some well-coordinated actions. The destructive and regressive nature of the consequences of increasing global problems determines the necessity to overcome them in order to pass to the progressive positive trend of global development (or, as was defined about twenty years ago, to the pathway of sustainable development as a new type of development preserving both civilization and biosphere). However, in order to move on to the sustainable

development, the humanity needs to create a new type of governance, namely, the global governance which will control the shift to this type of socio-natural development.

That is why within the evolutionary framework one can also analyze the changes from negative to positive assessment of global issues and their consequences. Global problems are just another form of global development and they call for a reverse in their further development in order to be overcome. One can clearly note the interaction of progressive and regressive processes and trends of the world development in globalization and global problems as the forms of global development. We believe that the identification of such evolutionary trends both in global political processes and in other fields of globalization will be one of the objectives of a new field of studies, namely, of Political Globalistics. Its ultimate goal will be to provide recommendations on the effective steps to reduce the negative (regressive) consequences of global processes and to increase their positive (progressive) impact.

Despite the fact that the majority of scientists regard globalization as a positive (axiologically) process of creation of an integral world resulting from the human activity, this phenomenon in the context of chaotic development of the modern world is characterized by intensified negative consequences. It is connected with the chaotic development of globalization and other global processes which should be managed in an anticipatory manner on a global scale. However, political globalization appears to lag behind many other globalization processes, such as economic globalization and informatization. The political aspect of globalization and other global processes becomes evident when some efforts are made to solve global problems. This encourages corresponding political transformations on a global scale which are supposed to lead to the intensification of progressive and innovative processes in the future.

The analysis of global processes (including globalization and global problems) with relation to evolutionary aspects seems an important step towards understanding their essence and full subject matter as well as revealing their interconnection and interaction with other global processes. The evolutionary analysis of global processes provides a more effective way of using these processes in the formation of global activity and especially global governance.

If we proceed from the above-made assumption that Globalistics is the field of knowledge that studies global processes and systems, it becomes possible to get a different perspective of the field of studies of Globalistics and even of global knowledge in general. Although Globalistics has never ignored the problem of development, and the evolutionary aspect in some way is expressed even in the definition of this scientific field, the 'processual and evolutionary' factors have not yet been given a proper position within Global Studies. Globalistics could hardly appear in its 'evolutionary version' from the very beginning, as at the primary stage of its formation the object of studies is defined and described and then there starts a systemization process. At the further stages of development, the methods of study and approaches corresponding to the object of study are formed. This is the formation process of almost every branch of science and Globalistics is hardly an exception. We can take not only Biology and Geology as an example, but Economics as well, as the theoretical part of these disciplines has been developing for several centuries but only in the last thirty years Evolutionary Economics appeared as a field of science. It was in fact the same period when the formation of Globalistics started.

The evolutionary basis provides an opportunity to predict the formation of new branches of Global Studies, practical global activity and especially global education. So far, Globalistics has started the formation of its research area both in theoretical and prac-

tical (including educational) aspects. The area of study of Globalistics includes not only globalization and global problems but also some broader categories of global processes and systems in their evolution (better to say, in the co-evolution) and this makes a significant change in the theoretical and cognitive perspectives of Global Studies. Within the development of Globalistics, the evolutionary stage of creation of global knowledge has followed the initial period of its accumulation and description. The process of creation of global knowledge at this stage develops *inter alia* according to the suggested theoretical model of Evolutionary Globalistics.

We consider the possible development of Evolutionary Globalistics as a new stage of formation of global knowledge. It is quite probable that at the first stage of its development Evolutionary Globalistics will evolve as one of the branches of Globalistics alongside with other fields of Global Studies. However, as the necessity of using the evolutionary approach in Global Studies is recognized, this sphere will be filled with ideas of development and it is quite probable that a new, evolutionary stage of global knowledge will start.

Here we offer not only a processual and systematic but also an evolutionary, or, to put it better, a global evolutionary approach which allows a more adequate definition of the place of Globalistics (and global processes and systems it studies) in contemporary science and in the general scientific worldview in the era of globalization. The simultaneous usage of both processual and evolutionary concepts expands the perspectives of the global knowledge development, giving an opportunity to more actively involve Globalistics into the processes of inter- and trans-disciplinary synthesis as well as to form an integral scientific knowledge of the planetary scale.

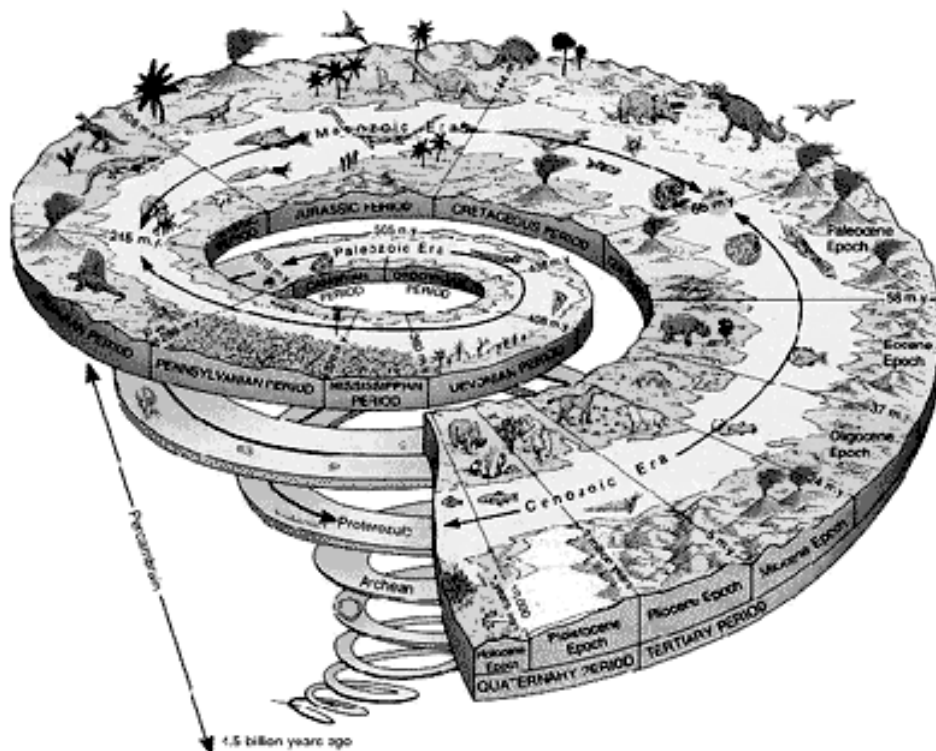
A clearer definition of the subject field of Globalistics will provide an effective process of formation of different areas of practical activity. The understanding of the place and role of certain global phenomena in the evolutionary process will enable the scientific community to take more effective steps in practical activity focused on the survival of the civilization and the preservation of biosphere which is the natural basis of existence. The evolutionary approach in Globalistics is especially relevant for global education which is responsible for the formation of advanced consciousness of the planetary scale, aimed at achieving noospheric and humanitarian goals.

It is important to analyze the development of global education and corresponding systems of training and upbringing with respect to facilitating the attempts to find solution for global issues and provide the world community's survival. If Globalistics and global knowledge in general are considered as one of the leading scientific fields of the twenty-first century, the global education, currently being formed, may become a catalyst accelerating the transition of the educational process to a brand new level, corresponding to the planetary noospheric future of the humanity. The application of integrative general scientific methods and approaches stimulates the emergence of new fields of Global Studies. Thus, the implementation of the suggested evolutionary and universal evolutionary approaches to Global Studies allows distinguishing such new areas of research as Paleoglobistics, Cosmoglobalistics, Futuroglobalistics and some others. The branch of Globalistics studying mainly natural and socionatural global processes that occurred in the past can be called Paleoglobistics. Contemporary global processes are studied in a trans-disciplinary field of scientific research which is traditionally referred to as Globalistics proper (Modern Globalistics) or Neoglobistics. And finally, the field of Global Studies that concentrates on understanding and forecasting the future of global processes and systems can be called Futuroglobalistics. Globalistics unite the three temporal fields of Global Studies mentioned above and sets a trend of their analysis within evolutionary approach.

The integration of neoglobalistic, futuroglobalistic and paleoglobalistic areas of Global Studies is one of the most important aims of Globalistics as a world-view and as a field of science and education. This, however, requires their development as separate branches of Globalistics.

Evolutionary Globalistics unites two world outlooks and methodological approaches: evolutionism and globalism. Globalism here is considered in its broad meaning as a world-view that analyzes the world from the point of general development concepts and regards it as directed changes in the essence of processes and systems (progress, regress and other forms and directions of development). Having no opportunity to dwell here upon the general development theory and history of evolutionism, we would like to draw the readers' attention to the existence of more accurate definitions of evolutionism. Evolutionism (Fig. 1) in the modern sense is a concept (and a methodological approach) which analyzes the processes under consideration not only from the point of their dynamics, transformations, changes, but also takes into account their development and evolution. This is a broader interpretation of evolutionism, which regards development not simply as gradual quantitative changes.

Fig. 1. Evolutionism



Evolutionism (Fig. 1) is a type of world perception that analyzes everything in terms of the following interpretation of development: 1) as directed changes in the essence of processes and systems; 2) as progressive quantitative and qualitative directed transformations of tangible objects; and 3) as gradual and reversible quantitative changes of objects without qualitative leaps.

Globalism as a global variant of systematic approach is a world perception focused on the recognition of the world as a planetary entity and of the humanity as a united global community in which global characteristics prevail and the involvement into the universal problems and processes is widely realized.

Development in its broad sense is defined as processes or tangible objects that demonstrate directed and, as a rule, irreversible changes of their content or structure. The fact that processes can either evolve in a progressive way, when a process (system) becomes more complex, or regress towards simplicity, degradation and decay, demonstrates the aforementioned directionality of development. In simplified form, the possible evolutionary trends (directions) of evolutionary processes look as follows:

Regress ← Global Processes and Systems → Progress

There exist other forms of development which are combinations of the ones mentioned above: neutral, wave, cyclic, and circular development, *etc.* However, all these forms are certain combinations of progressive and regressive trends.

In a broader sense, the concepts of development and evolution are practically equivalent. Evolution in this interpretation involves quantitative and qualitative spasmodic changes, as well as the interconnection between progressive, regressive, cyclical and other types and forms of development existing in nature. We mainly use the wider understanding of evolution as a synonym to the concept of development.

The correlation between historical and evolutionary approaches in Globalistics is one of important problems in this context. If the evolutionary approach coincided with the historical one, Charles Darwin would have no necessity to create his special Evolutionary Biology and many other fields of science would not have formed their evolutionary branches. The historical approach in Globalistics in the form of Historical Globalistics appeared prior to the evolutionary one. The historical approach consists in time ordering of facts and events relating mainly to social sphere, that is it deals with social dynamics in a temporal aspect.

In contrast to the historical approach, the evolutionary method of analysis of processes and phenomena does not consider all the temporal dimensions, but only the most important ones, often the qualitative transformations, and estimates directions of such changes, identifying whether they should be considered as increasing complexity or simplification, progress or regress. Evolutionary method also differs from the logical one, which is also contrasted with the historical approach.

Another peculiarity of the historical approach is connected with the fact, that history, which is supposed to be based on facts, cannot adequately analyze the future, where no facts exist so far. That is why the historical approach is based on the analysis of the past and only partly of the present, which, by the end of the analytical process, becomes the past. Therefore, history is associated with the science about the past, where some development processes can be singled out. However, the temporal aspect and special attention given to the past prevail in the historical approach.

Development processes could be to a certain extent detected in the past, however, the evolutionary processes do not coincide with the chronological order of events not least because they are not the phenomena of linear timing nature, which is required within the historical approach. The historical approach registers only sequences of facts and events and is not defined by the objective logic of development of the subject under scrutiny, which, in turn is analyzed within the evolutionary approach.

In the course of time historians try to link their science to a certain perception within the evolutionary approach. First, they used to identify the historical process with progress considering all the regressive changes accidental or deviating from the main trend of social dynamics. Later, the ideas of circulation and cyclical development, often observed in nature, became popular. After that, the idea of the end of history emerged, and not only allegorically (e.g., the way it was expressed by Francis Fukuyama). The historical approach turns out to depend on the evolutionary understanding of history, which provides additional arguments in favor of the difference between the two approaches under discussion. That is why Historical Globalistics is not the same as Evolutionary Globalistics, whereas the historical approach in Globalistics cannot be identified with the evolutionary one in the same branch of studies (Fig. 2).

Evolutionary Globalistics is an interdisciplinary conceptual approach to the analysis of global processes and systems in evolutionary aspect and, above all, on the basis of global evolutionism. Evolutionary Globalistics unites all the temporal aspects of Globalistics and, moreover, directs the analysis towards the sphere of global processes and systems in a unified evolutionary aspect, that is in the interconnection of the past, present, and future.

Fig. 2. Historical and Evolutionary Globalistics



Thus, Historical Globalistics is rather a description and, to a certain extent, a temporally ordered reflection of the world dynamics of human existence whereas Evolutionary Globalistics is the study of evolution and coevolution of global processes and their systematical synergetic phenomenon – global development.

The above-mentioned general scientific approaches and methods (such as global modeling, systematic, historical, ecological, socionatural, evolutionary, coevolutionary, synergetic, informational and other) significantly facilitate the global integrating development of science.

In general, there is no method or approach implemented solely in Globalistics. Some of the aforementioned methods have just been formed. Even globalism as a global variant of systematic approach is a world perception focused on the recognition of the world as a planetary whole and of the humanity as a united global community, in which global characteristics prevail and the involvement into the universal problems and processes is widely implemented.

At the early stages of development of Globalistics, the systemic approach and global modeling used to play an important part. Later, the development of Complexity Studies approach began which provided the basis of implementation of the evolutionary approach in Globalistics. Complexity Studies are a branch of science studying cooperative processes

and self-organizing (or self-disorganizing) systems in non-linear and unbalanced environment. These are the types of environment in which global processes take place on the global scale.

Self-organization as a rising complexity of the evolving global system or process, the increase of its informational content (the growing diversity of its elements, connections, and relations *etc.*) is of special interest for Globalistics. Self-disorganization, also studied within Complexity Studies, can be considered a regressive path of development, whereas self-organization can to a certain extent be identified with a progressive branch of evolution, as this process includes increasing complexity and organization of evolving global processes and systems.

We regard Globalistics as the most important component of the forming system of integral general scientific knowledge that defines the modern scientific world-view of the universal or global evolutionism. The integral general scientific knowledge is formed via trans-disciplinary synthesis of integrative processes in science. This system consists of forms of knowledge with most general research areas and is used in many (someday, probably, in all) fields of knowledge.

Evolutionary Globalistics will be formed as a trans-disciplinary conceptual approach to the analysis of global processes and systems from the evolutionary point and, above all, will be based on the results obtained in global (universal) evolutionism. The ideas on development came into Globalistics in different ways including the process of integration of the evolutionary concepts from the disciplines involved into Globalistics. However, global evolutionism can be considered the most important in this respect, as it penetrates more and more scientific disciplines and research spheres including Global Studies. Global evolutionism represents the basis of modern scientific world-view and a form of global (universal) evolution, in which self-organization of material systems is the main permanent process in the observable Universe. Global evolution is a continuous self-organization process in the material systems first in inanimate nature, then in the living matter and society, and after that – in the socionatural form (see Table 1). It is quite obvious that the evolutionary approach has penetrated Global Studies in different forms; however, it happens less intensively and effectively than the general scientific principles and approaches, already discovered in global evolutionism, are applied.

Table 1. Global Evolution

Evolutionary Levels		
Non-organic Nature	Organic Nature	Community
Submicroparticle	Biological macromolecular	Individual
Microparticle	Cellar	Family
Nuclear	Microorganic	Collective
Atomic	Organs and tissues	Big social groups (classes, nations)
Molecular	Organism itself	State (Civil society)
Macrolevel	Population	Regional state systems
Mega-level (planets, star-planetary systems, galaxies)	Biocenosis	Humanity itself
Meta-level (Metagalaxy)	Biosphere	Noosphere

Economic Globalization: The Five Basic Globalization Types

Bruno G. Ruettimann

Current economic theory gives no sufficient practical models to explain the recent economic development with respect to globalization. In fact, the economic globalization is not always the same globalization, which is recognized through the different manifestations of this phenomenon. Based on the four basic business typologies (commodities, standards, specialties, and convenience goods) a new model defines five fundamental types of economic globalization (1a, 1b, 1c, 2, and 3). Globalization Type 1 and subtypes are related to physical material interchange, Type 2 is related to financial participations and Type 3 – to the human factor. This distinction is necessary because each type has its own rational and performs differently from a globalization viewpoint. These basic globalization types help to model the triggering mechanism of their evolution and allow us to understand the competitive constellation and strategic moves of companies as well as the different latent potential for unemployment. The Basic Globalization Types distinguished by the author allows a vivid explanation of the characteristics of economic globalization when teaching.

Keywords: *business types, globalization types, foreign trade theory.*

Introduction

On the one hand, economic globalization is often viewed as an obscure process that apparently yields more profit for the companies, while increasing unemployment for the working classes. On the other hand, globalization is hardly controllable, since it is not only a process but rather a phenotypical manifestation within the causal systemic world of economy and politico-social behavior. But how can economic globalization be modelled? Many books have been written on globalization but none of them presents its integral theory. Basic concepts still go mainly back to foreign trade theory with Ricardian comparative cost advantages and Pareto optimality as well as Heckscher-Ohlin. The gravity model of Isard shows the geographic view on trade but finally did not encounter the merited success. A new view has been developed by Krugman in his *New Economic Geography*. Different business and globalization patterns are observable in different industries. On the one hand, we have the extraction of raw materials in particular geographic regions of the subtropics, or primary aluminium production in distant but low energy cost regions, and, on the other hand, semi-fabricated products manufactured near extensively industrialized regions. Cars produced in highly automated factories in urban area and exported worldwide, fast-food chains or franchised fashion stores covering the globe to conquest market share – different concepts, but the same target: the world market. Why do so many different con-

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cepts exist? What are the rules governing the economic structure and the competitive system? Is it possible to give a structure to globalization in order to be modelled?

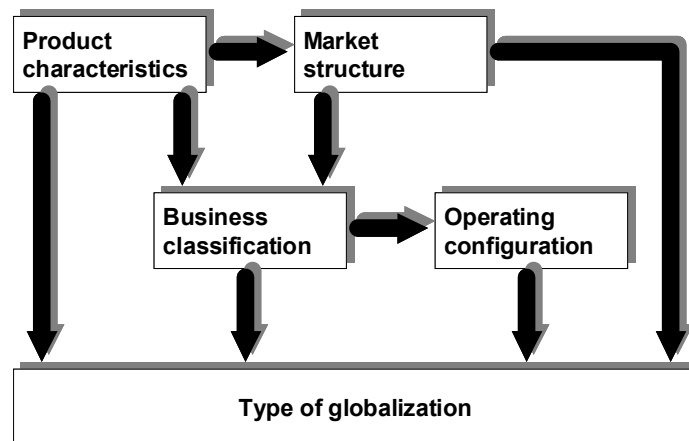
The Determinants for Globalization Type

Going beyond the usual phenomenological description of globalization, let us analyze the intrinsic logic of worldwide competition and the structure of the economic system. Our business system is mainly composed of:

- the transaction object, that is, a product or a service;
- the supply and demand structure, with the related transaction scheme;
- the operating configuration of supply (Rüttimann 2007).

The product is characterized by its attributes, for example, heavy or bulky, complex or precious, perishable or durable, and its customization degree, all these determining the transportability of the product. The transaction scheme describes how supply and demand interact determining the localization degree of the product. The market structures given by the number of market actors and relative concentration curves of supply and demand determine the competitive nature of the business. The operating configuration refers to how products are produced, at one extreme they are produced centrally within a single plant configuration and then distributed worldwide, or production facilities are spread around different geographic regions within a multi-plant configuration and products are sold locally. This leads to the induction scheme of Fig. 1 to classify first the business type and finally the globalization type. Indeed, as we will see, globalization is not always the same.

Fig. 1. Framework of globalization types determinants



As we can see in Fig. 1, it is evident that the typology of globalization is largely determined by the product characteristics. The backward determinants which influence product characteristics, market structure and determine the business classification, and finally the operating configuration, are:

- value of the product;
- transport cost and related range of distribution;
- production factors in terms of cost drivers;
- demand profile;
- supply structure (Rüttimann 2007).

The Four Basic Business Typologies

These main determinants characterize each business type within industrial system. Certain combinations of these determinants reveal clear patterns for each business type. Fig. 2 shows different businesses within the matrix of product-characteristics and market-structure which are the main drivers for business type classification (Rüttimann 2007). The representation of product-characteristics (differentiated or not) as one axis, and market-structure (oligopolistic or fragmented) as another axis within a matrix, leads finally to the following landscape of basic business types:

- commodities;
- specialties;
- standards;
- convenience.

Fig. 2. Selected businesses within the product-characteristic / market-structure matrix

PRODUCT CHARACTERISTICS	differentiated	Hotels Clothing	Automotive Electronics Equipment	Aerospace
		Toys Household Fast-food Retail	Insurances Electronic components	
	non differentiated	Textile Castings Extrusions	Chemicals	
		Cement Rolling	Coffee plantations Oil refinery	Ore extracting
		MARKET STRUCTURE		
		polypolistic	oligopolistic	

Fig. 3. Basic classification of business types





PRODUCT CHARACTERISTICS	differentiated	 Convenience	 Speciality
	non differentiated	 Standards	 Commodity
		MARKET STRUCTURE	
		polypolistic	oligopolistic

Fig. 3 presents a clear, systematic and structured view with which to classify roughly the businesses in types. It goes without saying that mixed types may exist. The ‘commodity type of business’ (e.g., primary aluminium or wheat) comprises all kinds of goods listed on efficient market places, such as commodities exchanges with world market prices. The ‘specialty type of business’ (e.g., electronics or automobile) embraces those durables and consumables, goods with a distinctive brand thus creating imperfect competition. The ‘standards type of business’ (e.g., cement or extrusions) covers the intermediate or semi-finished products with a rather polypolistic supply structure. The ‘convenience type of business’ (e.g., hotels or clothing) embraces most products of our life sold in retail stores or offered as services in a very fragmented market to reach the final demand, representing from the supply side an imperfect or monopolistic competition.

The Five Economic Globalization Types

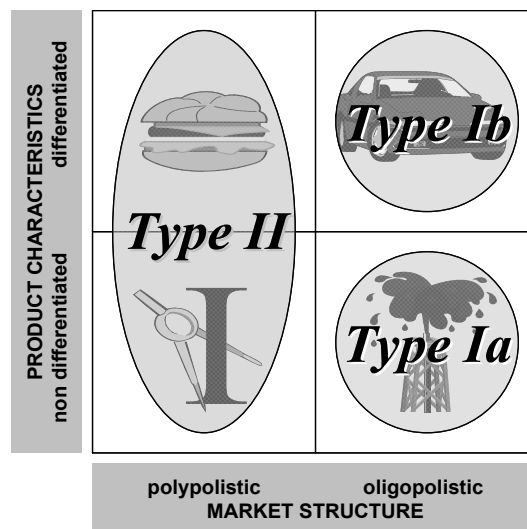
Having classified the business, the question is how globalization is influenced by each business type, or rather how globalization of the business evolves in each business type and according to which pattern. Analyzing the business types, it appears that the operating configuration determined by business is a major determinant for the globalization type. The intrinsic logic reveals two main types:

Type 1 – material (or physical) globalization for commodities and specialties;

Type 2 – immaterial (or financial) globalization for standards and convenience.

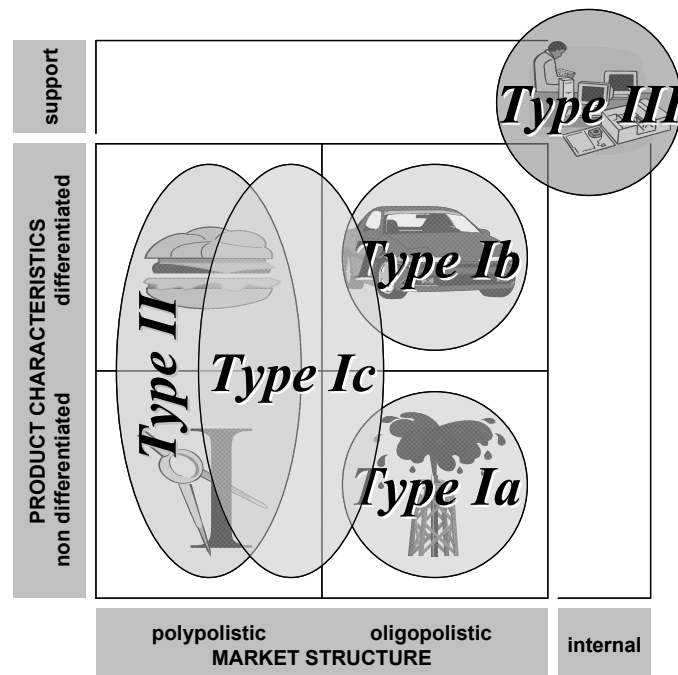
The difference between these types is substantial. Products of businesses following Type 1 globalization could be produced finally within a single plant operating configuration and shipped physically worldwide whereas products of businesses following a Type 2 globalization are produced locally for the local market. MNC (Multi National Corporations) will have in this case a network of local companies by FDI (Foreign Direct Investments) and the business idea is to exploit the know-how in doing business. In this fragmented markets they have to buy or set-up new enterprises to increase market share. But for Type 1 globalization we have to distinguish between commodities and specialties (Fig. 4).

Fig. 4. The natural types of globalization



Let us call Type 1a the ‘globalization of commodities’; through the listing on efficient market places such as commodity exchanges, this represents the pure example of business globalization. This type of globalization is inevitable because its effects are spreading all over the world. For the Type 1b ‘globalization of specialties’ the products characteristics are unique and therefore – to some extent – the price can be fixed by the supplier taking into account the value for the customer. This is due to the possibility of product differentiation within the competitive system. For the second type of globalization the distinction into subtypes is not necessary. Indeed, in markets not accompanied by material (physical) flows of products over a certain distance they, according to Chamberlin and Robinson, represent a local monopoly governed by imperfect competition. Therefore, we need to have no distinction of globalization patterns between standards and convenience type of products. The localization of the business leads to a globalization pattern with a market share adding strategy by FDI in order to grow in businesses of such types.

Fig. 5. The globalization type matrix

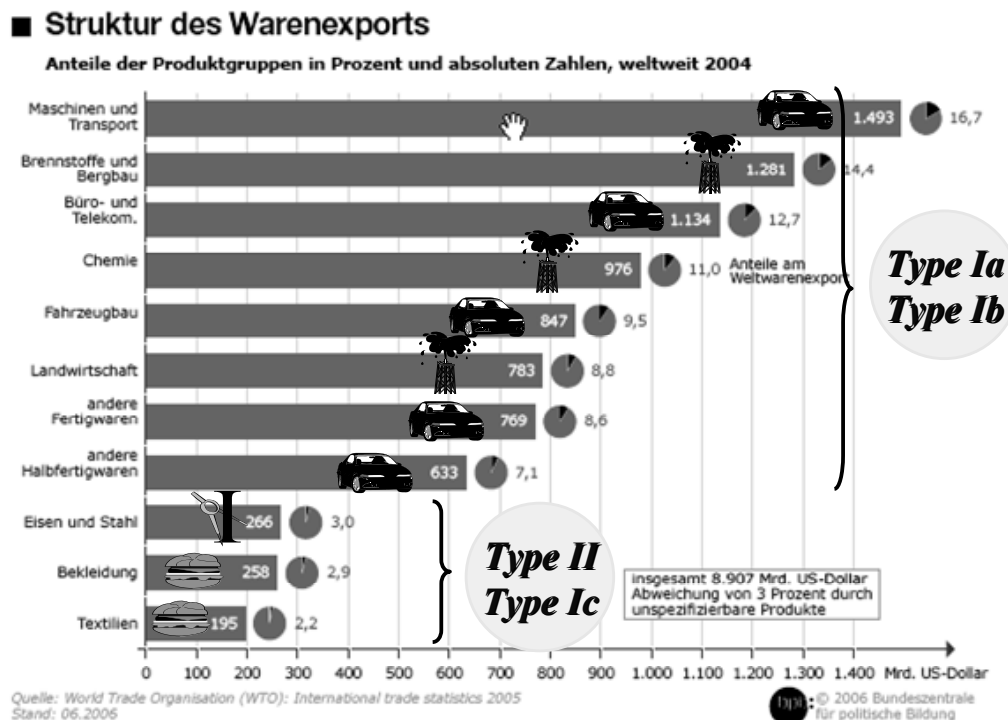


Are there any drivers able to upset this apparently stable situation? Yes, there is one. If the difference in price (intended as absolute cost advantage, according to Adam Smith) for the same goods in different economies exceeds a certain threshold, exports can temporarily become possible also for products following Type-2 globalisation. We may call this ‘economic arbitrage’. In these cases we can observe also a material flow of products within the Type-2 globalisation characterized businesses; let us call the Type-1c ‘opportunistic or low-cost globalization’. Typical are the exports of low-cost countries such as China. Furthermore, if a price difference between the salaries of white collar jobs also exists in different economies – and the skills are equivalent – then, thanks to today's efficient telecommunication infrastructure, it is also possible that enterprise functions as R&D, call

centres or accounting are outsourced to low-cost countries such as India; let us call the third type 'globalization of human factor or service'. Fig. 5 shows all types of globalization within a matrix allowing us to identify them roughly and with that the possible evolution or competitive issues to face within a certain business (Rüttimann 2007).

Does any evidence exist for this business and globalization type classification? The structure of exported goods for the year 2004 is shown in Fig. 6. The business type symbols have been added to each product group in order to show the pertinent classification according to the business type matrix as well as the corresponding type of globalization. We see that the majority of the product groups belong to the commodities and specialties. The graph shows also a statistical significant difference between the typical type 1 globalization business types of commodities and specialties compared to the type 2 globalization businesses of standards and convenience. The reason why the type 2 globalization businesses show some trade activity is mainly attributable to the opportunistic low-price globalization type 1c. We have to keep in mind that this classification is a rough but useful model, based on economic considerations, giving practical guidelines to structure the economic globalization phenomenon and is far from being a mathematically exact model according to physical laws.

Fig. 6. Goods export and relative business types

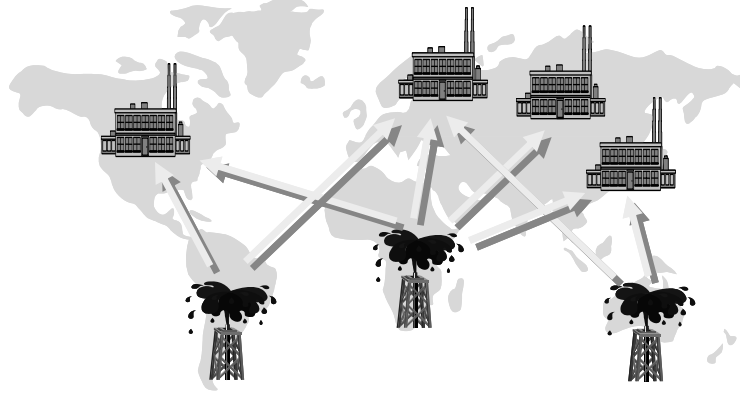


The Intrinsic Rational of Each Globalization Type

Indeed, these different globalization types also follow different economic laws. Type 1a, that is globalization of commodities, is characterized by global price building in efficient dedicated market places, and they are mainly characterized by unidirectional material

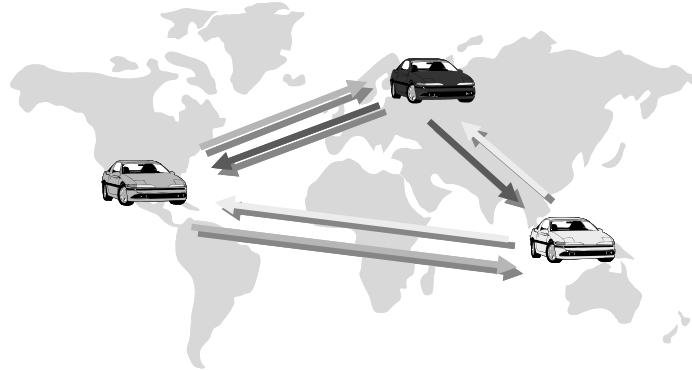
flows from countries of origin to the industrialized countries of transformation (Fig. 7). The preference for a raw material compared to another depends from the 'latent value' of a specific resource compared to another substitute resource. This also takes into consideration the ecological impact or the end-of-cycle aspects. The latent value expresses the value for the customer; it explains why a more expensive resource – like aluminium versus steel – is chosen.

Fig. 7. The foreign trade from the country of origin to the country of destination



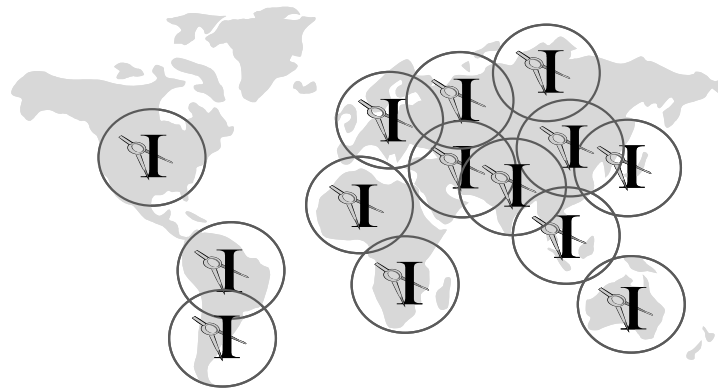
Globalization Type 1b is characterized by bi-directional flows of the same products between different economies (Fig. 8). Similar but differentiated products are produced by different competitors in different countries. The preference for one product compared to another depends on the 'cost-benefit' perception of the customer which can be translated to the 'competitiveness factor' of differentiated products of a producer. This competitiveness factor describes a comparative competitive advantage allowing us to model the behavior of economic actors for differentiated products. The higher the competitiveness factor is, the higher the market share of the producer. This can be seen as the modern interpretation of the Heckscher-Ohlin factors proportion theory.

Fig. 8. Bi-directional flows of the same products between different economies



Type 2 globalization products depend on the 'intrinsic market fragmentation' of the business (Fig. 9).

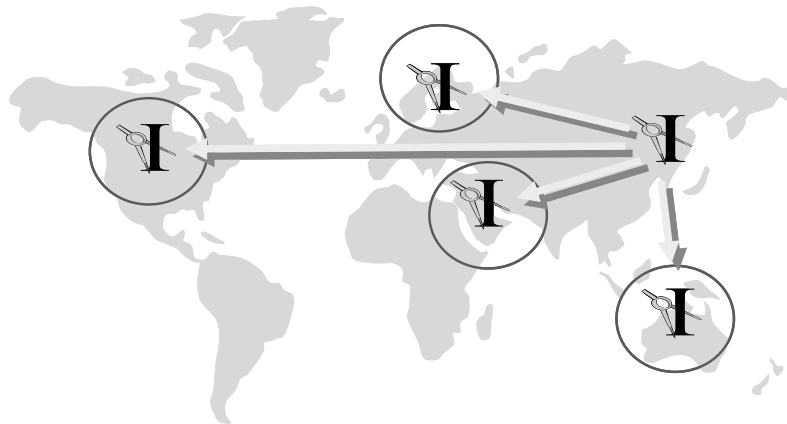
Fig. 9.



This market fragmentation is given by the characteristic of the product and the related transaction mechanism as well as its transportation cost. The fragmentation is determined as follows:

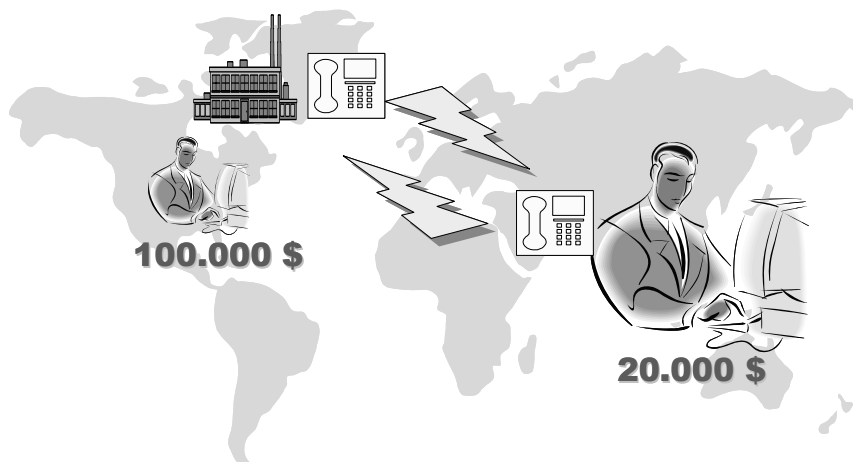
For simplicity, let us assume that all the companies are the same size in the market; due to the fragmentation of the market, this approximation is valid for most companies in the market. The higher the demand is, the more supplying companies a fragmented market requires. The market share in a fragmented market is fairly irrelevant. The demand is uniformly fragmented in the market and therefore the supply, due to the characteristics of the product, is also uniformly fragmented. The market structure is the driving element within this simplified analytical view. The reason for entering this market, besides the desire to exert control, is to increase one's own added value within the value chain. This reasoning is especially valid for the intermediate products (standards). The reasoning for convenience such as services (hotels) or fast-food is similar, but through the differentiation of the product and the end customers' behaviour, the causal relation has to be reconsidered, taking into account the comparative characteristics of the product or service offered. Indeed, combined with the fragmentation of the final demand, Type 2 fragmentation is an indicator for the necessary polypolistic offer structure to reach the next transformation stage of the value add chain or to be distributed to the final customer.

Type 1c is based on the price differential of the same product with low differentiation properties between two economies. Type 1c globalization is an example par excellence to explain the classic foreign trade theory based on absolute cost advantages. It is interesting to note that propensity of Type 1c globalization is based not on volume and growth but first on price difference and secondly, on capacity utilization. The absolute cost advantage is the most evident driving factor for the Type 1c globalization. We may call the resulting driver the 'propensity for globalization' (Fig. 10).

Fig. 10.

The higher the difference is, the higher the material flows of these products from countries of emerging economies to countries of advanced economies, although – from the intrinsic nature of the business – it would follow the Type 2 globalization.

Type 3 globalization is modelled by the ‘comparative skill of labor’, that is the level of skills available and the respective cost as well as the cost to transfer the service in question to the economy with lower cost (Fig. 11).

Fig. 11.

The theory of factor allocation, in this particular case labor, follows the same theory valid for economic goods. But let us enlarge on the concept and analyze the comparative skills of labor as well. In this context labor is intended to be rather as white collars. Type 3 globalization deals with the supporting function within a company. The main driver for the transfer of service functions to low-cost countries is the cost of salaries including the social contributions for white collar workers. Changes in considerations, according to experiences made, can even overweight the labor cost advantage and lead to outsourcing being reconsidered. This type of globalization is increasing not only for the supporting

functions but also for every service based on human skills where the service can be supported by the new telecommunication possibilities.

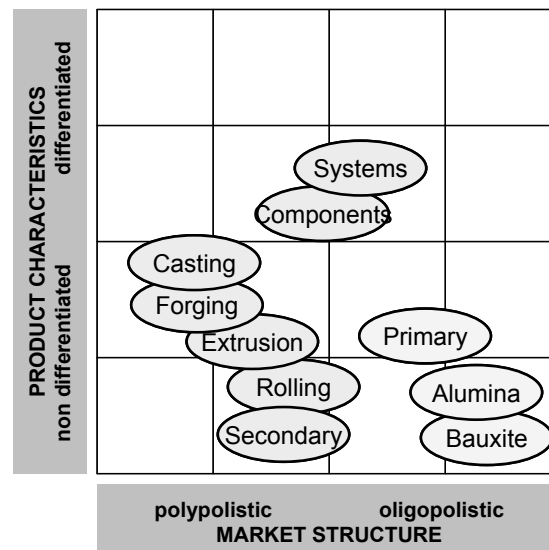
Each business follows its own globalization type. Nevertheless, there are also the mixed types. Especially Type 2 globalization is also observable in superposition to 1a and 1b globalization from MNE to increase market share. These imperialistic expansion strategies are often denounced due to the latent fear of unemployment. But the natural types of globalization (*e.g.*, 1a, 1b, 2) are not responsible for the negative social consequences such as unemployment; the socio-political consequences are mainly caused by Types 1c and 3. But this is another story. The phenomenological modelling of economic globalization presented here is further accompanied by a common denominator for the intrinsic reason of macroeconomic globalization evolution. The rationale behind this will lead to the Central Theorem of Globalization (Rüttimann 2007).

The Aluminium Industry

Big structural changes are occurring in the aluminium industry (Pawlek 2007). These changes have been analyzed extensively (Rüttimann 2008b), and the results were presented during the closing keynote speech at the Aluminium 2008 World Trade Fair and Conference in Essen. The globalization types presented here help us to understand the ongoing fundamental changes in the global industry logic. Let us try to put the aluminium technologies into the business type matrix and then derive the pertinent globalization type. Bauxite mining belongs to the ore extracting operation often performed by big vertically integrated aluminium companies or multinational mining groups, characterized by a clear oligopolistic market structure. Per definition, the differentiation aspect of a commodity is not existent, may be with the exception of the ore content. The same is valid for the calcined alumina. The outcome of the smelting process is primary aluminium, traded as ingots on commodity exchanges mainly in the quality 99.7 per cent. Also for primary aluminium we have the same oligopolistic structure composed of MNC with some independent SME (Small Medium Enterprises) as exceptions. We can classify all these goods as belonging to the commodity type of business, goods flowing from their natural origin to the big conversion centers and where low cost operations are essential (Fig. 12). The world of semi-fabricated products is mainly composed of the technologies rolling, extrusion, castings, forgings, and thin foil rolling. Although these plants often belong to MNC, the operating configuration has a fragmented structure in order to be near to their customers; MNE try to serve a wider geographical extension by setting-up a network of plants (*e.g.* SAPA, Hydro Aluminium, Novelis). The reasons of the fragmentation originate from the cumbersome shape of the products but also the need to interact with customers resulting therefore in a more regional-oriented business, but also the availability of technology and the nonsense of long transportation distances for non-differentiated products. The fragmentation of the business favors the concomitance of SME mainly in the extrusions, castings and forging technologies. For example, in extrusions the SME make up 50 per cent of the plants (Conserva 2007). All these technologies can be classified as belonging to the standards type business. These are intermediate goods with a low differentiation degree of the product. We can even classify the transaction object rather to be a service than only a physical product. Indeed, the customer asks primarily three questions: Can you manufacture this product? When can you supply it? How much does it cost? Thus, the extrusion companies are not supplying a product but performing a service by putting their produc-

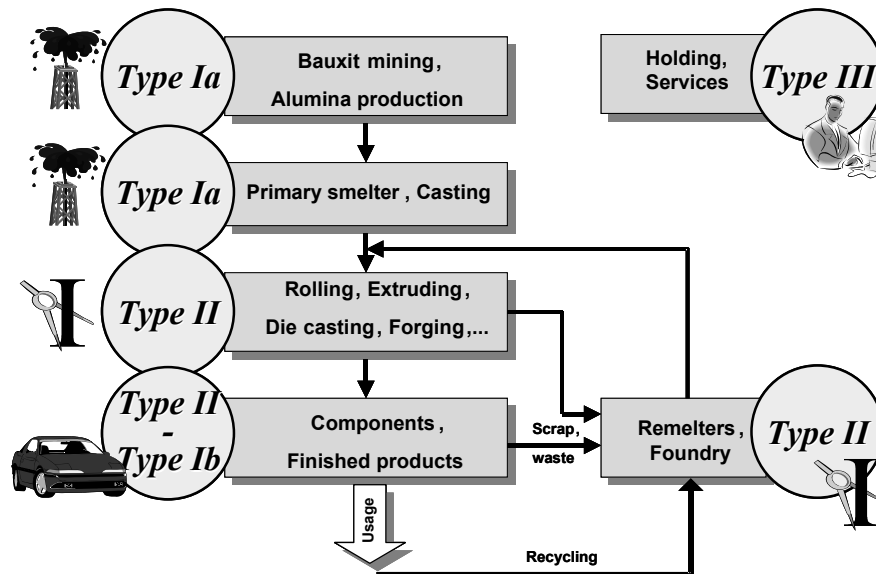
tion capacities to the service of their customers and trying to give the shortest delivery time, accurate punctuality and specification-conform quality (Rüttimann 2002). Sometimes in the aluminium industry we can observe the downstream integration in the value-added chain right to ready-to-be-assembled components or systems for the building industry. These products have already a quite advanced differentiation degree for the solution proposed. On the other hand, the concentration degree from the supply point of view may vary. Nevertheless, we can classify it as belonging to in-between of specialties type of business and convenience.

Fig. 12. The aluminium technologies within the Business Typology Matrix



The products (or technologies) of the aluminium industry belong mostly to the commodities and standards type of business (Fig. 12); this seems to be reasonable due to the fact that the transaction type is rather a B2B than a B2C.

The aluminium industry has been mainly composed of fully vertically integrated concerns covering the bauxite extracting, alumina refinery, primary aluminium smelting, different semis production technologies, and sometimes through to the manufacturing of components for the automotive, aerospace or electrotechnical industries (Fig. 13). Interesting is to see the apparently neat cut between the upstream operations (bauxite, alumina and primary) from the so-called downstream technologies (rolling, extrusions, castings, and forgings). Indeed, the basic aluminium production supplies the common basic raw material to all the other aluminium semis operations. Fig. 13 shows the relative business typology as well as the related globalization type on each level of the value-added chain. It clearly shows the co-existence of different globalization typologies within the aluminium industry. Therefore, we cannot simply say that we can observe a general globalization tendency in the aluminium industry but we can also assert it will perform differently along the added-value chain according to the different industry logics with different effects on the competitive system as well as the social system of employment.

Fig. 13. The value-add chain of the aluminium industry

In addition to the predominant globalization type of each value added stage, secondary globalization types may overlap. In fact, globalization Type 2 will mainly face additional competition in the form of opportunistic low-price globalization Type 1c. This has been especially the case of North American extrusion imports from China during the last years (Rüttimann 2008a). Further, in case of MNC, markets with natural physical globalization Types 1a and 1b will also be overlapped by the financial globalization Type 2 with the logic of adding market shares for global growth. This shows that the present disintegration of integrated aluminium companies is also related to the difference in the basic globalization types with different industry logics. Indeed, for globalization Type 1 the CSF (Critical Success Factor) is cost, the price being determined by LME (London Metal Exchange), whereas for globalization Type 2 the CSF is mainly a service. Moreover, despite the fact that the semis operation such as extrusion or rolling have the same globalization type, we find that between the different semis operations there are no relevant synergies observable from management point of view (Rüttimann 2008b) (except for contingent situations). This is underlined by the fact that the alloys are often quite different even with separate recycling loops, and the products out of different technologies are only partly, if ever, substitutable needing different conceptual engineering design. The reason for backward integration is more related historically as well as to have direct access to the aluminium metal, securing the supply side.

References

- Conserva, M. 2007.** *Global Market Trends of Aluminium and Aluminium Products*. Proceedings of the 6th World Congress Aluminium Two Thousand. March 13–17. Florence: Interall publications.

- Pawlek, R. 2007.** *The Rio Tinto Alcan Deal – Marking the Dawn of a New Era for Metals.* ALUMINIUM 9/, Giesel Verlag.
- Rüttimann, B. 2002.** *Strategy and Tactics in the Aluminium Semi-Finished Products Industry.* ALUMINIUM 78 (2002) 1/2 and 4.
- Rüttimann, B. 2007.** *Modeling Economic Globalization. A Post-Neoclassic View on Foreign Trade and Competition.* Münster: Verlagshaus Monsenstein und Vannerdat.
- Rüttimann, B. 2008a.** *The Globalization Trap of the Aluminum Extrusion Industry.* Paper presented at the 9th International Extrusion Technology Congress ET08, May 13–16. Orlando, Florida, USA.
- Rüttimann, B. 2008b.** *Which Globalisation for the Aluminium Industry?* ALUMINIUM, Part 1 in 1-2/2008 and Part 2 in 3/2008, Giesel Verlag.

Interdisciplinary Methodology: A Graduate-Level Course in Global Studies

Patrick Manning

By definition, Global Studies is global in scope; at best this field of study is interdisciplinary as well. Individual programs at various institutions have made great strides in crossing disciplinary lines in their educational programs. Nevertheless, while university public relations releases speak confidently of the interdisciplinary, transdisciplinary, and cross-disciplinary advances in many scientific fields, the overwhelming majority of instruction remains constrained within disciplinary limits. This brief essay describes one effort, central to a collaborative effort in Global Studies, that has succeeded in bringing together advanced graduate students from many fields and enabling them to share the experience of exploring the character and interplay of several disciplines. The purpose of this work, at the level of individual students, is to strengthen their skills in learning basic competence in fields other than their own core discipline. At the level of the Global Studies program, the purpose is to develop a framework and a language for discussing multiple disciplines at once, and for using that language to sustain a broadly interdisciplinary discourse.

Keywords: *Global Studies, World History, course objectives, Schedule and Readings.*

Global Studies and World History at the University of Pittsburgh

At the University of Pittsburgh, a developing program of graduate study links Global Studies and World History. The alliance of the centers – the Global Studies Center and the World History Center – brings a historical dimension to global studies, and an interdisciplinary dimension to world history.¹ Global Studies, with focus on the themes of global health, security, society, economy, awards graduate certificates based on an 18-credit course of study. The World History Center emphasizes research, graduate and undergraduate study, and awards a History PhD with thematic concentration in world history. The two centers collaborate in global educational outreach to the community and to secondary schools.

The course in Interdisciplinary Methodology was taught in 2009 and 2012 and is scheduled to be taught again in 2015. It has enabled the university to create a space where

¹ The Global Studies Center (<http://www.ucis.pitt.edu/global>), directed by Prof. Nancy Condee, is housed in the University Center of International Studies (UCIS) at the University of Pittsburgh and is supported by Title VI funding from the U.S. Department of Education. The World History Center (<http://www.worldhistory.pitt.edu>), directed by Prof. Patrick Manning, is housed in the Department of History. The Global Studies Center and the World History Center have a joint membership in the international Global Studies Consortium.

cross-disciplinary analysis is formally recognized, encouraged, and developed. The course has strengthened each of the centers, their relationship, and has expanded interdisciplinary discourse in other parts of the university.

Purpose and Objectives of the Course

This is a course in interdisciplinary theory and methods for graduate students who have achieved substantial strength in an academic discipline – in the social sciences, humanities and arts, natural sciences, or information sciences – and who wish to develop strength in an additional discipline and in the interplay of disciplines. Each student reads to prepare collaborative presentations describing key aspects of two disciplines, develops statements on the frameworks, assumptions, links, parallels, and contradictions of various theories, and prepares a major paper on a previously unfamiliar methodology. Each discipline is discussed at an introductory level, but the exercise of comparing and connecting disciplines requires advanced conceptualization. The course works in association with a practical research project to develop a world-historical dataset containing systematic, worldwide data on selected variables and topics.²

The general objective of this interdisciplinary graduate course is to encourage the development of a multidisciplinary academic discourse at the University of Pittsburgh, particularly emphasizing global perspectives, in which interested graduate students and faculty members participate, under the aegis of the Global Studies Center and the World History Center. The specific course objectives are:

- to introduce students to a wide range of disciplines, theories, and methods. Discussion is to include the framework, data, method, and analysis for each discipline;
- to enable individual students to develop substantial strength in a new discipline and method of their choice;
- to compare and contrast the various disciplines, seeking out links and parallels among them;
- to develop a common language for cross-disciplinary discourse, encompassing multiple disciplines;
- to contribute to creation of a global historical dataset reflecting many of these disciplines: such a dataset is developing through the Collaborative for Historical Information and Analysis (CHIA).

At the end of the course, students should:

- have gained literacy in disciplines in the humanities and arts, social sciences, natural sciences, and information sciences. By ‘literacy’ is meant:
 - familiarity with elements of the scope (subject matter, variables and frameworks), method (types of analysis), and theory of multiple disciplines;
 - familiarity with the range of subfields in each discipline, especially the distinctions among small-scale and large-scale (or micro and macro) dimensions of the discipline;
 - familiarity with categories of empirical study in the same disciplines;
 - familiarity with the similarities, links, complementarities, and contradictions of various disciplines and their theories.

² Collaborative for Historical Information and Analysis (CHIA, <http://www.chia.pitt.edu>), sponsored by the World History Center.

- Have developed particular strength in one new methodology;
- have developed a language for cross-disciplinary discussion and analysis;
- have gained experience in the combination of data from different disciplines to construct a global picture of aspects of human society.

Instructor and Background

I have been the instructor each time the course has been given. I have long been a practitioner of cross-disciplinary study and sought out the opportunity to teach this course. I am now principally a world historian but was trained as an economic historian of Africa with a Master's degree in Economics and with an undergraduate degree in Chemistry.³ My graduate study in African history included cross-disciplinary course work and a concluding seminar, taught by Jan Vansina, in which students worked on archaeology, historical linguistics, economics, politics, social anthropology. Since receiving my degree, I have conducted additional study and practice in demography, historical studies of language, information science, and multimedia production. This provided a basis for leading a course in which students could address multiple disciplines at varying levels of depth, and could share the experience and exchange their understanding not only of specific disciplines but of cross-disciplinary analysis more broadly. In my opinion, the qualification to be instructor of such an interdisciplinary course is not mastery of the various disciplines but a willingness, based on past experience, to take on new disciplines and gain a substantial if basic acquaintance with each new field.

Students by Discipline

2015 – the course will now be required for graduate students in World History; other students are expected from a broad range of disciplines.

2012 – students were based in Communications, Economics, Information Science (4), Linguistics, Political Science, Public Health, Slavic Language & Literature, Sociology (2), Statistics, and Theatre.

2009 – students were based in East Asian Studies, Education, English (4 total, in cinema, rhetoric, composition, and literature), and History (7 total in various regional fields).

Initial Presentations and Discussions

During the first two weeks of the course, the instructor gives initial presentations providing background to disciplinary and interdisciplinary study and also to model the presentations that student groups are to give later in the semester. The initial presentation reviews epistemological dynamics – the interplay of disciplines, frameworks, theories, evidence, analysis, and verification. The second presentation addresses philosophical maps of the disciplines, distinguishing the succeeding analytical approaches of positivism, modernism, postmodernism and realism – and asking whether the present generation will be able to sustain multiple philosophies of analysis. In the 2009 version of the course, I continued in week three to give a presentation on quantitative social science and led students in an exercise on locating and reading articles in major scientific journals: *Nature*, *Science*, and *PNAS* (*Proceedings of the National Academy of Sciences*).

³ Patrick Manning, Andrew W. Mellon Professor of World History (<http://www.manning.pitt.edu>).

Also in the first two weeks of the course, students debate and select the disciplines they wish to explore, the order in which they will discuss the disciplines, and the membership of the teams to explore each discipline. In the third week, students identify the topic for their major paper and submit an abstract for the paper: the abstracts are posted and shared among all in the class.

The Disciplines We Explored

Disciplines explored in 2012, in their order of discussion: Economics; Political Science; Sociology; Anthropology; Linguistics; History; Visual arts; Literature; Psychology; Environment; Social evolution and systems.

Disciplines explored in 2009, in their order of discussion: Literary Theory; Religious Studies; Literacy; Ecology; Linguistics; Theories of Pedagogy; Sociology; Cultural Anthropology; Oral History; Gender Studies.

Student Assignments

In general students are to explore the disciplines, present two disciplines to their colleagues, develop strength in one new discipline, and share in an expanding, transdisciplinary discourse.

(1) Each week, students are responsible for completing the assigned reading, exploring optional readings, and gaining familiarity with the elements of the discipline under study in that week.

(2) Each week, two or three students select, assign, and lead discussion on readings conveying the nature of the method assigned for that week and the significance of its results. (Students select their assignments at the start of the semester.)

(3) Students prepare to join actively in each week's cumulative discussion by scrutinizing the epistemology apparent in each method and by working to develop a language for cross-disciplinary discussion.

(4) Each student selects a method to learn in depth and submit, at the end of the semester, a substantial paper articulating that method and discussing an application. The paper is posted and discussed.

For each week, the instructor selects one or two concise 'core readings' that provide an introduction to the discipline under study. In the eight meetings from Week 3 through Week 11, groups of three students present on their selected discipline or disciplines. In addition to the core reading assigned by the instructor, the presenters select and assign readings of no more than 150 pages, and distribute them via an online resource at least seven days in advance of their discussion. Student discussion leaders are to lead discussions during the 100 minutes of discussion in which they present, rather than lecture. That is, the instructor assesses the discussion leaders according to the breadth and depth of the discussion during the time allocated to them, rather than simply the skill of their lecture.

Topics for possible discussion of a methodology include: subject matter of the discipline, the objectives of analysis, the materials of study and empirical evidence, the methods of analysis, and the contending or succeeding theories in each field. In addition, students are encouraged to identify the main journals and standard works in each field, the principal practical and theoretical debates, the evolution of the field, the outstanding accomplishments of the field, and the links of each field to other fields.

Examples from Presentations and Discussions

One recurring result in student presentations on disciplines was that they addressed a significant amount of their time to tracing the history of each field. For fields such as political science and sociology, but also for psychology and ecology, students found it fascinating to see how the methods, theories, and debates in each field changed over time. Another recurring point was that students found models of scientific method in the standard materials of several disciplines, and sought to identify the variations on a common model. The notion of equilibrium was remarkably widespread, appearing not only in Economics but also in Ecology. Equally striking, however, was the immense amount of variety in each discipline, so that none of them could be characterized by a single theory or analytical focus. The diversity of disciplinary analysis reflects especially the range of scales from micro to macro within each field: Microeconomics and Macroeconomics have quite different theories, and much the same can be said for Psychology, Ecology, and Linguistics. While certain subfields gain prominence and cross-disciplinary reputations – behavioral economics has been one such in recent years – other fields within the same discipline may continue productively along quite different lines.

Despite the importance of recurring themes in discussing the various disciplines, each discipline and each presentation brought attention to particular issues of interest. In political science, discussion centered on the debate over ‘perestroika’, the argument by a somewhat dissident group of scholars that quantitative studies, dominantly electoral, had led to neglect of important qualitative issues in politics. In Sociology, the discussion focused on the distinctive analysis of Bayesian statistics.

For linguistics, the presentation focused especially on the issue of metaphor, beginning with the simple matter of social valuations placed on the terms ‘up’ and ‘down’, and showing some of the many other concepts that are conveyed through metaphor. The presentation of visual arts and literature posed very basic questions about the origins and nature of creativity, expression, interpretation – it presented art and science first as contradictory, then as unified. For ecology, the presenters used organizational charts to show the tiny place of this field within environmental science and within the academy more broadly; they also focused on non-equilibrium studies of ecology. The concluding presentation on systems and social evolution traced social evolution through six disciplines, emphasizing the tension between conflict and cooperation.

Some Results of the Course

Each student was to write a paper of no more than 25 pages in length, presenting a critical exploration and defense of a methodology likely to be of importance to his or her future research. The first two pages of each paper are to be a summary of the entire paper aimed at facilitating discussion among students in the course. The methodology could be that of a single discipline or sub-discipline, or a combination of techniques from different disciplines. The papers must reflect substantial reading and reflection, and must convey the logic and the relevance of the problem to significant research issues. This is not a research paper, but an articulation and defense of a methodology that could readily be applied to research. Titles of the 2012 papers are shown in Appendix 3: none were publishable, yet it may be that they reflect the opening of new and broader thinking by the authors.

In addition to the readings listed in the Course Schedule, students had the opportunity to develop more extensive bibliographies for disciplines of interest to them. These might include: condensed statements of scope, theory, and method; introductory textbooks; ad-

vanced handbooks; scholarly journals; outstanding recent works (articles or books); and studies including or applicable to historical data.

One concrete result of the course was the publication of a paper co-authored by the instructor and a student. As promised to students at the beginning of the course, I was able to select one of the strongest students to work with me as a research assistant on an aspect of the CHIA project for building a world-historical archive. I selected Sanjana Ravi, a public health student who had strong skills in articulating analytical frameworks and dynamics. In the fall of 2012 we worked together in defining the completing an article that used a systems approach to encompass the study of human populations from the multiple disciplinary perspectives of Demography, Economics, Political science, and Sociology. The reason for this effort to link disciplines was that the construction of a world-historical archive would require combining the strengths of all these disciplines in order to make estimations to begin filling in the large amount of missing data.⁴

As usual in education, the students pass through in one or several years, and only the teachers remain in place. Yet somehow the ethos of a curriculum makes itself felt, perhaps simply because of the repeated work of the teacher but more likely because of interactions of students with each other in the classroom and beyond it. Even the institution may adjust to developing lines of inquiry within its walls. So I think there is hope that collaborative instruction and learning of interdisciplinary methods may gradually become a part of university life.

Appendix 1. Course Schedule and Readings (revised, April 2012)

Week 1 (January 9). *Introduction: Epistemological dynamics* [Manning].

Reading: King, Keohane, and Verba, *Designing Social Inquiry*, pp. I–xi, 1–33.

(January 16) – No class: Martin Luther King, Jr. Holiday.

Week 2 (January 23). *Philosophy: Positivism, Post-modernism & Realism; causation and feedback.*

Presenter: Patrick Manning.

Reading: King, Keohane, and Verba, *Designing Social Inquiry*, pp. 34–114.

Wilson, E. O., *Consilience* (New York: Knopf, 1998), chapters 1 and 2.

Campbell, Donald T., *Methodology and Epistemology for Social Sciences*, vii–xix.

Thompson, Willie, *Postmodernism and History*, 6–26, 56–73.

McNeill, William H., ‘Passing Strange’, *History and Theory* (2001).

Week 3 (January 30). Social Science 1. *Economics*.

Presenters: Helga Cabellero-Benitez, John Christie-Searles, Sanjana Ravi.

Reading: King, Keohane, and Verba, *Designing Social Inquiry*, pp. 115–230.

Wikipedia, ‘Economics’, <http://en.wikipedia.org/wiki/Economics>

Humphries, Jane. ‘Rational Economic Families? Economics, the Family, and the Economy’. In Joanne Cook, Jennifer Roberts, and Georgina Waylen (eds.), *Towards a Gendered Political Economy*. London: MacMillan Press, 2000.

Week 4 (February 6). Social Science 2. *Political Science*.

Presenters: James Osborne, Sharon Quinsaat, Qi Zhang

Reading: Schramm, S. F., Caterino, B. (eds.) *Making Political Science Matter: Debating Knowledge, Research, and Method* (New York: New York University Press, 2006).

Week 5 (February 13). Social Science 3. *Sociology*.

⁴ Patrick Manning and Sanjana Ravi, ‘Cross-Disciplinary Theory in Construction of a World-Historical Archive’, *Journal of World-Historical Information* 1 (2013): 15–39. doi: 10.5195/jwhi.2013.3.

Presenters: Jeremy Burton, Jinyuan Liu, James Osborne

Reading: Smith, Philip (ed). *The New American Cultural Sociology* (Cambridge: Cambridge University Press, 1998).

Alford, Robert. *The Craft of Inquiry. Theories, Methods, Evidence* (Oxford: Oxford University Press, 1998).

Week 6 (February 20). Social Science 4. *Anthropology*.

Presenters: Sarah Bishop, Lauren Collister, Beach Gray.

Reading: Barth, Fredrik, *et al.*, *One Discipline, Four Ways: British, German, French and American Anthropology* (Chicago: University of Chicago Press, 2005).

Week 7 (February 27). Humanities and Arts 1. *Linguistics*.

Presenters: Ryan Champagne, Courtney Lauder, Peter Wood.

Reading: Wikipedia, 'Linguistics', <http://en.wikipedia.org/wiki/Linguistics>.

(March 5) – Spring Break.

Week 8 (March 12). Humanities and Arts 2; Social Science 5. *History*.

Presenters: Sharon Quinsaat, Ya-Wen Yu, Qi Zhang.

Reading: Manning, Patrick, *Navigating World History* (New York: Palgrave, 2003), 313–323.

Week 9 (March 19). Humanities and Arts 3. *Literature and Visual Arts*.

Presenters: Ryan Champagne, John Christie-Searles, Sanjaya Ravi.

Reading: Castle, Gregory. *The Blackwell Guide to Literary Theory* (Oxford: Blackwell Publishing, 2007).

Smith, Terry, *What Is Contemporary Art?* (Chicago: University of Chicago Press, 2009).

Week 10 (March 26). Natural Sciences 1; Social Science 6. *Psychology*.

Presenters: Jinyuan Liu, Peter Wood, Jungwon Yeo.

Reading: Wikipedia, 'Psychology', <http://en.wikipedia.org/wiki/Psychology>.

Week 11 (April 2). Natural Sciences 2. *Environmental Studies*.

Presenters: Beach Gray, Jeremy Burton, Sarah Bishop.

Reading: Scoones, I. 'New Ecology and the Social Sciences: What Prospects for a Fruitful Engagement?' *Annual Review of Anthropology*, 28 (1999) pp. 479–507.

Week 12 (April 9). Combining Disciplines 1. *Social Evolution and Systems*.

Presenters: Helga Caballero-Benitez, Sanjana Ravi, Lauren Collister.

Reading: Bentley, Jerry (ed.), *The Oxford Handbook of World History* (2011).

Carneiro, Robert L. 'Stellar Evolution and Social Evolution: A Study in Parallel Processes', *Social Evolution & History* 4 (2005).

Week 14 (April 16). Presentations 1.

Presentation of main papers (first half).

Reading: paper summaries circulated by authors.

Week 15 (April 23?). Presentations 2.

Presentation of main papers (second half).

Reading: paper summaries circulated by authors.

Appendix 2. Titles of Methodological Papers, April 2012

1. 'A Methodology of Experience: A Defense of Oral History within the Field of Communication'.

2. 'Choosing wisely: Behavioral economics and information overload'.

3. 'Behavioral Economics: the bounded rationality and prospect theories as critiques of the rationality paradigm'.

4. 'What Does This Word Mean? Reframing Disciplines in Interdisciplinary Communication'.

5. 'Tanzanian Benedictine Monasticism: Modernization through Primary Education'.
6. 'Measuring Advertisement Reaction'.
7. 'Seeing Is More Than Believing: Visual Ways of Knowing'.
8. 'In Defense of Qualitative Case Studies and their Utilization in Indigenous Politics'.
9. 'Using Comparative Method in Explaining the Role of National Context in Homeland-Oriented Migrant Mobilization'.
10. 'The Patient's Dilemma: A Methodology for Infectious Disease Investigation'.
11. 'A Cognitive Turn Toward Performance Scholarship'.
12. 'Post-Colonialism: Toward an Interdisciplinary Approach of Cultural Politics and Postmodernist Historiography'.
13. 'The mathematicization of sociology and Political Science: a new institutionalism comparison'.

Appendix 3. Comments from Students, June 2013

Here are comments from three students in the course, written a year after the course ended. They suggest that the course did indeed make some progress in enabling students to address cross-disciplinary issues in a more confident fashion.

- 'The course allowed me to see the connectivity between the social sciences; moreover, I was able to see familiar skills sets, familiar literature, and familiar diction applied to different social sciences in different ways.'

- 'We all spoke different languages, and this course introduced me to some tools that help bridge that language gap between our disciplines. ...'

I had already been an Open Access advocate in my own scholarly work, but in the class I heard about how others had similar issues surrounding access to data and research and no one knew how to fix them. ... I decided that I wanted to devote my efforts to helping to remedy that problem and turned my career path in a new and exciting direction: Open Access policy.'

- 'When I read a research paper, for example, I now pay closer attention to the assumptions underlying the authors' hypotheses and chosen methods. As someone who works in a multidisciplinary profession, I find these skills to be invaluable.'

Beyond Global Studies. An Introductory Lecture into a Big History Course*

Leonid E. Grinin, Andrey V. Korotayev, and David Baker

Global studies can be made not only with respect to the humans who inhabit the Earth, they can well be done with respect to biological and abiotic systems of our planet. Such an approach opens wide horizons for the modern university education as it helps to form a global view of various processes. However, we can also ask ourselves whether the limits of our studies can be moved further. Would not it be useful for the students to understand the evolution of our planet within the context of the evolution of our Universe? The need to see this process of development holistically, in its origins and growing complexity, is fundamental to what drives not only science but the human imagination. This shared vision of the grand narrative is one of the most effective ways to conceptualize and integrate our growing knowledge of the Universe, society, and human thought. Note that the respective discipline already exists and it has been developing quite successfully for more than three decades; it is denoted as Big History.

Keywords: Big History, Universe, evolution, complexity, grand narrative.

What is Big History?

Big History has been developing very fast indeed. We are currently observing a ‘Cambrian explosion’ in terms of its popularity and diffusion. Big History courses are taught in the schools and universities of several dozen countries, including Australia, Great Britain, China, Germany India, Japan, Korea, the Netherlands, the USA, Russia and many more. The International Big History Association (IBHA) is gaining momentum in its projects and membership. Conferences are beginning to be held regularly. Hundreds of researchers are involved in studying and teaching Big History. What is Big History? And why is it becoming so popular? According to the working definition of the International Big History Association, ‘Big History seeks to understand the integrated history of the Cosmos, Earth, Life and Humanity, using the best available empirical evidence and scholarly methods’ (Grinin *et al.* 2014a: 5). So, Big History brings together constantly updated information from the scientific disciplines and merges it with the contemplative realms of philosophy and the humanities. It also provides a connection between the past, present, and future. Big History is a colossal and extremely heterogeneous field of research encompassing all the forms of existence and all timescales.

* The text of this lecture has been prepared on the basis of our introduction to the edited volume *Teaching & Researching Big History: Exploring a New Scholarly Field* (Grinin *et al.* 2014b). For more information on Big History see, e.g., Grinin *et al.* 2011, 2014b; Grinin, Korotayev, Rodrigue 2011; Grinin, Korotayev 2013; Grinin, Ilyin, and Korotayev 2012.

Scientific specialization and the immense amounts of information contained in the various ‘compartments’ of academia can hinder our capacity for inclusiveness, but, paradoxically, it also amplifies the need for it. Many scientists would like a more integrated vision that sees beyond their meticulous and complicated fields of specialization. One can see the growth of such interest in the framework of individual disciplines, as well as in interdisciplinary research. Moreover, without using ‘mega-paradigms’ like Big History, scientists working in different fields may run the risk of losing sight of how each other’s tireless work connects and contributes to their own.

Yet while interdisciplinarity is not a new idea, many disciplines can run the disappointing tendency of only paying lip-service to it. This is not possible in Big History. In a discipline that *starts* by weaving together all the disciplines into a single narrative, interdisciplinary work is not only possible, it is essential. A unification of the disciplines, a deep symbiosis of academic cells, will open up research areas that are vital to the development of the twenty-first century thought and culture. As has been mentioned on a number of occasions, the rapidly globalizing world needs global knowledge that explains a unified global system (see Grinin, Carneiro, Korotayev, and Spier 2011; Grinin and Korotayev 2009). Indeed, globalization itself becomes a vehicle for Big History. The very existence of the International Big History Association is proof of that.

Origins of Big History

Big History ideas did not appear out of nowhere. They have deep roots in human spirituality, philosophy, and science. In the nineteenth and twentieth centuries there was an explosive growth of scientific knowledge accompanied by a deep differentiation of disciplines. This made borders between scholars and scientists much more rigid, while research specialization grew by an order of magnitude. As Erwin Schrödinger justly noted: ‘[I]t has become next to impossible for a single mind fully to command more than a small specialized portion of it’. However, he continued, there is ‘no other escape from this dilemma (lest our true aim be lost forever) than that some of us should venture to embark on a synthesis of facts and theories’ (Schrödinger 1944: 1). As disintegration peaked in the twentieth century, such undertakings were not mentioned as often as they ought to have been. When an interdisciplinary synthesis was mentioned at all, it was seen as a lofty goal, the barest whisper of a dream, rather than an approachable reality.

A very different picture appears if we look further back in the history of human thought. From the very moment of their emergence, grand unified theories of existence tended to become global. Even the Abrahamic theological tradition, that was dominant in the western half of the Afroeurasian world-system in the Late Ancient and Medieval periods, contains a sort of proto-Big History. It presents a unified vision of the Universe’s origin, development, and future. In that grand narrative, the Universe has a single point of creation and it develops according to a divine plan. Similarly, classical Indian religious philosophy loosely resembles the principle of the unity of the world through the idea of reincarnation, in a Hindu approximation of the First Law of Thermodynamics. Even the delusions of astrologers and alchemists contained the idea of universal interconnectedness (stars and planets affect human fates; everything can be transformed into everything else). This is only a fragment of the pre-modern ideas that contained an element of Big History thinking. Many interesting insights on the properties of the Universe can be found in pre-scientific worldviews generated by various human civilizations.

Ancient philosophy even aspired to find the single principle cause for everything that exists¹. This was done in a very insightful way in the works of the ancient Greeks, who were especially interested in the origins and nature of the Universe. Note that, even while Greek (and, more generally, classical) philosophy concentrated on ethical or aesthetic issues, it was still dominated by the idea of the single law of *Logos* that governed the whole Universe, with many different interpretations of it provided by various thinkers. This was reinforced by the concept of a ‘cosmic circulation’ that also influenced human society. Medieval philosophy inherited the Greek tradition ‘to comprehend the universe on the basis of archetypical principles ... as well as the inclination to detect clarifying universals in the chaos of the life’ (Tarnas 1991).

The Beginning of Modern History of Big History

The transition from the geocentric (Ptolemaic) to the heliocentric (Copernican) perspective took many decades notwithstanding all the brilliant conjectures of Giordano Bruno (1548–1600). Discoveries by Johannes Kepler (1571–1630), Galileo Galelei (1564–1642), and Isaac Newton (1643–1727) produced a majestic vision of the Universe. For the first time in history, a more advanced form of Big History thinking was produced – not by the speculations of philosophers or theologians but on the basis of corroborated facts and mathematically formulated laws of Nature. ‘Mechanicism’ became the dominant paradigm in western scientific thought (including the social sciences). Thus the formation of a unified scientific worldview was consolidated. ‘Natural philosophy’, the precursor term for science, investigated everything from the highly cosmological to the deeply sociological and continued to preserve its dominant position in the eighteenth century: the age of the Enlightenment (see Barg 1987; Grinin 2012 for more details).

However, new ideas stressing historical variability soon emerged. Those ideas and discoveries led to a crisis of the dominant scientific paradigm. In geology, Georges-Louis Leclerc, Comte de Buffon, systematized all the known empirical data and analyzed a number of important theoretical issues of the development of the Earth and its surface. He also produced a few insights that turned out to be important for the development of the theory of biological evolution. The hypothesis of the emergence of the Solar System from a gas nebula was first spelled out by philosopher Immanuel Kant and later by mathematician and astronomer Pierre-Simon Laplace in one of the notes to his multivolume *Mécanique Céleste* (1799–1825).

Some of the philosophical roots of evolutionary ideas are very old indeed, and scientifically based evolutionary ideas first emerged in the seventeenth and eighteenth centuries. But the idea of universal evolution only became really influential in the nineteenth century. The first major evolutionary theory in biology was produced by Jean-Baptiste Lamarck (1744–1829), who advocated change via acquired traits. Another no less evolutionary theory was formulated in geology by Charles Lyell (1797–1875) who, in his *Principles of Geology* (1830–1833), refuted the theory of catastrophism.

It is no coincidence that the first narratives beginning to resemble modern big histories first emerged around this time. The first real concerted and conscious attempt to unify the story of the physical processes of the universe to the dynamics of human society was made

¹ In particular, in the classical Indian Philosophy one finds the belief in the ‘eternal moral order’ of the Universe as well as ideas of the collossality of the world space and time, infinity of the Universe comprising millions of such worlds as our Earth (see, e.g., Chatterjee, Datta 1954).

by Alexander von Humboldt (1769–1859), a Prussian natural philosopher, who set out to write *Kosmos* (1845–1859), but died before he could complete it. Also, Robert Chambers anonymously published the *Vestiges of the Natural History of Creation* in 1844. His book began with the inception of the Universe in a fiery mist and ended with a history of humanity.

In the second half of the nineteenth century, the concept of evolution by natural selection as pioneered by Charles Darwin (1859) and Alfred Russel Wallace (1858) merged with the idea of social progress espoused by Herbert Spencer (1857, 1862, 1896) and became a major influence on western thought. The idea of evolution/progress as a transition from less to more complex systems dramatically transformed the human worldview (note: although Spencer paid more attention to biological and social evolution, he treated evolution as a universal process taking place at all possible levels – from microorganisms to galaxies). It became known that stars and planets, including the Sun and the Earth, are objects that have their origin, history, and end. There was a great deal of indication that revolutionary changes in astronomy were forthcoming.

Two discoveries produced the most important contribution to the emergence of Big History. First, the interpretation of the redshift by Edwin Hubble in the 1920s demonstrated that the Universe is not static and eternal, but is in a general state of expansion, as if it began with a primordial ‘explosion’. By the 1940s, interacting teams of physicists and astronomers from around the world speculated on the existence of left-over radiation from this event – cosmic microwave background radiation. This radiation was detected in 1964 by Arno Penzias and Robert Wilson and provides the most convincing observational evidence for the explosive beginning of our Universe, which in the late 1940s George Gamow and Fred Hoyle called the ‘Big Bang’. The simple epithet became useful for the theory's supporters. Moreover, the emergence of *historical* evidence for a point of origin of the Universe established a sense of chronology and transformed astrophysics into a historical science. The door firmly swung open for scholars of all shades to produce a universal history, called, to use our own simple epithet, ‘Big History’.

Cambrian-Style Explosion of Big History

By the last decades of the twentieth century, it became clear that the natural sciences contained a clear narrative from the Big Bang to modern day and this unity began to find expression in an increasing number of written works. For the first time it was actually possible for the mainstream to grasp the entire chronology.² This began the process of thinking about both natural and human history as part of the unified whole. In 1980, astrophysicist Eric Jantsch wrote *The Self-Organizing Universe* (Jantsch 1980), now sadly out of print, which tied together all universal entities into a collection of processes. It constitutes the first modern unifying Big History. Jantsch did a credible job of examining human history as an extension of cosmic evolution and as just one of many structures operating beyond thermodynamic equilibrium. Jantsch's work constitutes the first attempt to find a common strand or dynamic that streamlines, unites, and underwrites the entire grand narrative. It is thus possible to explore history from the Big Bang to modern day without being weighed down by the scale of the chronology.

Around the same time American-based astrophysicists, geologists, and biologists such as Preston Cloud, Siegfried Kutter, George Field, and Eric Chaisson began writing and

² A phenomenon best discussed in David Christian (2009).

teaching courses about the cosmic story. Then at the end of the 1980s history and psychology professors like David Christian in Sydney, John Mears in Dallas, and Akop Nazaretyan in Moscow³ began to craft grand narratives that incorporated the human story more seamlessly into a larger universal narrative. Fred Spier did the same at Amsterdam and Eindhoven. From here, a Cambrian-style explosion of courses and works has occurred.⁴

Eric Chaisson's *Cosmic Evolution* (2001) defines the unifying theme of Big History as the rise of complexity, which, he argues, occurs when energy flows through matter become increasingly dense. Chaisson even proposed a way of objectively measuring this trend. Free energy rate density is the energy per second that flows through an amount of mass. In this way Chaisson empirically established that complexity has been rising in the Universe for 13.8 billion years. The theme of rising complexity was incorporated into David Christian's *Maps of Time* (2005) which further employed it in the human tale. Fred Spier, most recently in his book, *Big History and the Future of Humanity* (2010), has emphasized the Goldilocks principle, and how the rise of complexity occurs when conditions like temperature, pressure, and radiation are 'just right' for the rise of complexity to occur. Spier asserts that the rise of complexity combined with energy flows and the Goldilocks principle form the beginnings of an overarching theory of Big History.

The unique approach of Big History, the interdisciplinary genre of history that deals with the grand narrative of 13.8 billion years, has opened up a vast amount of research agendas. Or, to engage an evolutionary metaphor, it has triggered a scholarly speciation event where hundreds of new niches have opened up waiting to be filled. The ecological terrain is vast and the numbers that currently populate it are few. The research comes in a variety of forms. We big historians must collaborate very closely to pursue this vibrant new field.

Big History and Evolutionary Megaparadigm

Big History has much in common with the interdisciplinary evolutionary research, and this is not a coincidence that the Russian version of Big History is called Universal History or Universal Evolutionism.

We need epistemological key terms in order to understand change in nature and society in its entirety. There are not that many scientific notions that could play the role of such key terms. We think that evolution is one of them.

One of the clearest manifestations of the universal evolutionary approach is just Big History that considers the process of evolution as a continuous and integral process – from the Big Bang all the way down to the current state of human affairs and beyond.

Big History provides unique opportunities to consider the development of the Universe as a single process. However, one should note that the Big History studies tend to pay little attention to such an important aspect as the unity of principles, laws, and mechanisms of evolution at all its levels. We believe that combining the Big History potential with evolutionary approaches can open wider horizons in this respect (see Grinin *et al.* 2011). Indeed, common traits in development, functioning, and interaction can be found in

³ For more detail on the Russian Big History tradition see Nazaretyan 2011.

⁴ For recent survey of size and of the field see Rodrigue, Stasko 2009; and the canon of seminal works includes but is not confined to Fred Spier's *The Structure of Big History: From the Big Bang until Today* (1996), David Christian's *Maps of Time: An Introduction to Big History* (2004), Eric Chaisson's *Epic of Evolution: Seven Ages of the Cosmos* (2006), Cynthia Stokes Brown's *Big History: From the Big Bang to the Present* (2007), and *Evolution, a Big History Perspective* (Grinin, Korotayev, Rodrigue 2011).

apparently quite different processes and phenomena of Big History. In this respect the universality of evolution is expressed in those real similarities that are detected in many manifestations at all its levels. The comparison between different types of macroevolution appears to be essential for the search for such similarities. We also believe that there are several important aspects to such an approach.

First of all, there are established fundamental notions such as ‘matter’, ‘energy’, ‘entropy’, ‘complexity’, ‘information’, ‘space’, and ‘time’, that provide a general framework for comparisons.

In the second place, matter has some very general properties, which were perhaps already predetermined during the initial super dense phase of the universe. During the subsequent phases of universal evolution, matter acquires very specific forms, while new properties emerged at every new stage of the universal evolution.

In the third place, a few general system-dependent structural properties of matter⁵ appear to determine similarities between different types of macroevolution. Ashby (1958) noticed that while the range of systems is enormously wide, most systems consist of physical parts: atoms, stars, switches, springs, bones, neurons, muscles, gases, *etc.* (see also Hall and Fagen 1956). In many cases we are dealing with very complex systems that are found in many places (Haken 2005: 16). The emergence of forms of greater complexity results from the transition from one evolutionary level to another. The general principles related to the functioning and development of such objects can be described by general system theory. The concepts of self-organization and transition from equilibrium to a non-equilibrium state are also relevant in this respect. In addition, both biotic and abiotic systems show complex interactions with their environment that can be described in terms of general principles.

In the fourth place, mega-evolutionary trajectories can be considered as components of a single process, and their different phases can be regarded as different types of macroevolution that could be similar in terms of their main trends and directions as well as particular mechanisms. This will be discussed in more detail below.

In the fifth place, we can speak about common vectors of megaevolution as well as common causes and conditions during the transition from one level of organization to another. There is a number of very important categories that are relevant for the analysis of all phases of megaevolution, most notably self-organization, stable and chaotic states, phase transition, bifurcation, *etc.*

It appears to be also possible to speak about some other points confirming the unity of many principles of the organization and functioning of our world at all the levels and in rather various aspects. Hence, the integration of such paradigms as Big History and megaevolutionary comparative studies allow researchers and students to view a colossal panorama of our Universe at various levels and in very different aspects.

References

- Ashby, W. R. 1958. General Systems Theory as a New Discipline. *General Systems* 3: 1–6.
 Barg, M. A. 1987. *Epochs and Ideas. The Formation of Historism*. Moscow: Mysl. In Russian.
 Brown, C. S. 2007. *Big History: From the Big Bang to the Present*. New York – London: The New Press.

⁵ If we take into account the concept of dark matter, it might be more appropriate to speak about ordinary matter as ‘matter that is capable of evolution’ (see Grinin 2013).

- Chaisson, E. 2001.** *Cosmic Evolution: The Rise of Complexity in Nature*. Cambridge: Harvard University Press.
- Chaisson, E. 2006.** *Epic of Evolution: Seven Ages of the Cosmos*. New York: Columbia University Press.
- Chatterjee, S., and Datta, D. 1954.** *An Introduction to Indian Philosophy*. 5th ed. Calcutta: University of Calcutta Press.
- Christian, D. 2005.** *Maps of Time: An Introduction to Big History*. Berkeley: University of California Press.
- Christian, D. 2009.** The Evolutionary Epic and the Chronometric Revolution. In Genet *et al.* (eds.). *The Evolutionary Epic: Science's Story and Humanity's Response* (pp. 43–50). Santa Margarita: Collingswood Foundation Press.
- Darwin, C. 1859.** *The Origin of Species by Means of Natural Selection; or, the Preservation of Favoured Races in the Struggle for Life*. 1st ed. London: John Murray.
- Grinin, L. E. 2012.** *From Confucius to Comte: The Formation of the Theory, Methodology and Philosophy of History*. Moscow: LIBRPAKOM. In Russian.
- Grinin, L. E. 2013.** *Big History of Development of the World: Cosmic Evolution*. Volgograd: Uchitel. In Russian.
- Grinin, L. E., Baker, D., Quaedackers, E., and Korotayev, A. V. 2014a. (Eds.).** Big History's Big Potential. *Teaching & Researching Big History: Exploring a New Scholarly Field* (pp. 5–16). Volgograd – Grand Rapids, MI: 'Uchitel' Publishing House – International Big History Association.
- Grinin, L. E., Baker, D., Quaedackers, E., and Korotayev, A. V. 2014b. (Eds.).** *Teaching & Researching Big History: Exploring a New Scholarly Field*. Volgograd – Grand Rapids, MI: 'Uchitel' Publishing House – International Big History Association.
- Grinin, L. E., Carneiro, R. L., Korotayev, A. V., and Spier, F. 2011.** Evolutionary Mega-paradigms: Potential, Problems, Perspectives. In Grinin L. E., Carneiro R. L., Korotayev A. V., and Spier F. *Evolution: Cosmic, Biological, and Social* (pp. 5–29). Volgograd: Uchitel.
- Grinin, L. E., and Korotayev, A. V. 2009.** Social Macroeolution: Growth of the World System Integrity and a System of Phase Transitions. *World Futures* 65(7): 477–506.
- Grinin, L. E., and Korotayev, A. V. 2013. (Eds.).** *Evolution: Development within Big History, Evolutionary and World-System Paradigms. Yearbook*. Volgograd: 'Uchitel' Publishing House.
- Grinin, L., Korotayev, A., and Rodrigue, B. 2011. (Eds.).** *Evolution, a Big History Perspective*. Volgograd: Uchitel.
- Grinin, L. E., Ilyin, I. V., Korotayev, A. V. 2012. (Eds.).** *Universal and Global History. Evolution of the Universe, Earth, Life and Society*. Volgograd: Uchitel. In Russian.
- Hall, A. D., and Fagen, R. E. 1956.** Definition of System. General Systems. *Yearbook of the Society for the Advancement of General Systems Theory* 1: 18–28.
- Jantsch, E. 1980.** *The Self-Organizing Universe: Scientific and Human Implications of the Emerging Paradigm of Evolution*. Oxford: Pergamon.
- Lyell, C. 1830–1833.** *Principles of Geology*. 3 vols. London: John Murray.
- McNeill, J. R., and McNeill, W. H. 2003.** *The Human Web: A Bird's-eye View of World History*. New York: W.W. Norton & Company.

- Nazaretyan, A. 2011.** Mega-Evolution and Big History. In Grinin L., Korotayev A., Rodrigue B. *Evolution, a Big History Perspective* (pp. 82–100). Volgograd: Uchitel.
- Rodrigue, B., and Stasko, D. 2009.** A Big History Directory, 2009: An Introduction. *World History Connected* 6/9.
- Spier, F. 1996.** *The Structure of Big History: From the Big Bang until Today*. Amsterdam: Amsterdam University Press.
- Spier, F. 2010.** *Big History and the Future of Humanity*. Chichester: Wiley-Blackwell.
- Schrödinger, E. 1944.** *What is Life? The Physical Aspect of the Living Cell*. Cambridge: Cambridge University Press.
- Spencer, H. 1857.** Progress: Its Law and Causes. *The Westminster Review* 67: 445–465.
- Spencer, H. 1862.** *First Principles*. 1st ed. London: Williams & Norgate.
- Spencer, H. 1896.** *A System of Synthetic Philosophy*. London: Williams and Norgate.
- Tarnas, R. 1991.** *The Passion of the Western Mind: Understanding the Ideas That Have Shaped Our World View*. New York: Ballantine Books.
- Wallace, A. R. 1858.** On the Tendency of Varieties to Depart Indefinitely from the Original Type. *Zoological Journal of the Linnean Society* 3: 46–50.

Section 2. GLOBAL STUDIES CURRICULA AND SYLLABI AROUND THE WORLD

Part 1. UNIVERSITIES WITH GLOBAL STUDIES EDUCATION AT BACHELOR'S LEVEL

Arizona State University, USA



1. Name of university	Arizona State University
2. Year of foundation	1885
3. Name of faculty where Globalistics is studied	School of Politics and Global Studies
4. Name of program and year of beginning	Global Studies (2005)
5. Number of students	No information
6. Levels of study (undergraduate, postgraduate, PhD)	The school offers undergraduate Degrees (BA, BS) in Global Studies.
7. Languages of study	English
8. Short description of program	

Undergraduate program in Global Studies normally takes eight semesters to complete. During this period students are supposed to study the causes and consequences of problems that cross national boundaries, and the governance of these problems in social, cultural, and economic contexts. Each student addresses real world problems and their solutions in the context of the New American University. This mission is enabled by an internationally recognized faculty from a wide variety of disciplines in the social sciences, humanities and law with extensive global experience.

9. Full description of program

Undergraduate program in Global Studies employs diverse theoretical and disciplinary perspectives in the study of global processes, institutions and problems across global, national, regional and local scales. It includes compulsory courses and elective ones as well.

Compulsory, or fundamental, courses are:

- Access to the World;
- College Mathematics;
- Cultural Diversity in the USA;

- Global Awareness;
- Historical Awareness;
- Humanities, Fine Arts and Design;
- Internship;
- Natural Science;
- Professional Global Career Development;
- Political Statistics;
- Research Methods;
- Second Language;
- Social and Behavioral Sciences;
- Social Statistics;
- Thinking Globally: The Individual and Authority.

Elective courses are divided into five blocks which represent the areas the current students focus on: Cultural Perspectives and Place, Economic Development, Global Governance, Urban Systems and Environment, Violence and Conflict.

These courses are:

1) *Cultural Perspectives and Place track:*

- Global History since 1500;
- Religion and Globalization;
- Introduction to Southeast Asia;
- Global Trends;
- Place making in a Globalizing World;
- China in Transition;
- Yoruba in the African Diaspora;
- Islam and World Affairs;
- Islam & Islamic Societies in Africa;
- Cultural Aspects of Globalization;
- Religions of India;
- Globalization and China;
- Gender, Culture and Development.

2) *Economic Development track:*

- Economic Development in Historical Perspective;
- Economic Development in Transitional Societies;
- Global Markets;
- Policies for Economic Development;
- Principles of Economic Development;
- Global Trade in Real Time;
- Capstone: Understanding China.

3) *Global Governance track:*

- Mechanisms of Governance;
- International Institutions and Global Governance;
- Alien Rule and Discontent;
- Diplomacy and Foreign Service;
- International Institutions;
- Working International Organizations;
- Contemporary Global Trends;
- World Society;
- Religion and Global Politics;
- Different Voices within Contemporary Islamic Discourse;

- Race, Ethnicity, and Politics;
- International Women;
- Comparative Empires;
- The Use of Covert Action: The U.S. Experience;
- Capstone: Global Civil Society and Global Studies;
- Capstone: Collective Action & Global Public Goods.
- 4) *Urban Systems & Environment track:*
 - Global Urban Systems;
 - Urbanization in China;
 - Globalization and the Environment: Problems and Solutions;
 - Introduction to Environmental Issues;
 - Global Environmental Conflict;
 - Gender Globalization and Sustainability;
 - International Development and Sustainability;
 - Natural Catastrophe & Urban Response;
 - Capstone: Coping with Climate Change.
- 5) *Violence & Conflict track:*
 - Humanitarian Crisis and International Intervention;
 - Globalization, Colonialism, and Religion;
 - Intro to Humanitarian & Disaster Relief Work;
 - Violence/Conflict/Human Right;
 - Working/Humanity Organizations;
 - Religion;
 - Nationalism and Ethnic Conflict;
 - Facing the Past: Truth, Memory, Denial after Atrocities;
 - Politics of Global Justice;
 - Media & Politics: Conflict and Terrorism SE Asia;
 - National and Ethnic Conflict.

The course of study is intellectually demanding and stimulating, ensuring students to graduate with defined skills necessary for careers in globally oriented corporations, government agencies, international organizations, and non-governmental organizations, and for admission for leading graduate and professional schools.

10. International agreements

No information

11. Contacts (university, faculty, chairs)

School of Politics and Global Studies

Coor Hall, 6th Floor

975 Myrtle Avenue

Tempe, AZ 85287-3902

Phone: 480-965-8563

Fax: 480-965-39-29

E-mail: spgs@asu.edu

Homepage: <http://pgs.clas.asu.edu/>

University of Minnesota, USA



UNIVERSITY OF MINNESOTA

1. Name of university	University of Minnesota
2. Year of foundation	1851
3. Name of faculty where Globalistics is studied	College of Liberal Arts (Institute for Global Studies)
4. Name of program and year of beginning	Global Studies
5. Number of students	No information
6. Levels of study (undergraduate, postgraduate, PhD)	Undergraduate
7. Languages of study	English
8. Short description of program	

This program allows students to combine thematic and regional courses with the major's core theoretical courses, experiential opportunities and language study. The degree encourages the development of strong analytical skills, writing skills, and the ability to approach issues from multiple viewpoints. By combining coursework, language study, and experiential opportunities such as study abroad and internships, the major is ideally suited for students wishing to work in public, private, and non-profit organizations dealing with global and cross-cultural issues.

9. Full description

All courses taught in Global Studies are:

- twentieth-century Europe from the End of World War II to the End of the Millennium;
- twentieth-century India;
- Advanced Topics in South Asian Studies;
- Altering States: after Communism;
- Cold War: 1945–91;
- Crime and Human Rights;
- Culture and Society of India;
- Cultural Anthropology;
- Debating 'Development': Contested Visions;
- Directed Studies;
- Directed Research;
- Environment & Empire;
- Environment and Development in the Third World;
- Europe: a Geographic Perspective;
- Europe and its Margins;
- Food, Culture and Society;
- Foreign Language;
- Freshman Seminar;
- From Printing Press to Internet: Media, Communications and History;
- Fund and World Trade Organization;
- Gender and the Family in the Islamic World;
- Geography of Global Cities;
- Global Institutions of Power: World Bank, International Monetary;
- Globalization: Issues and Challenges;
- Globalization and Social Justice;

- Global Studies;
- Globalize This! Understanding Globalization through Sociology;
- Honors Course: Supervised Research Paper;
- Honors: Global Studies Practicum;
- Honors: Senior Seminar in Global Studies;
- History of Capitalism: Development since 1500;
- Human Rights Advocacy;
- Human Rights Internship;
- International Human Rights Law;
- Islam and the West;
- Knowledge, Power and the Politics of Representation in Global Studies;
- Life for Sale: Global Debates on Environment, Science, and Society;
- Living in the Global;
- Major Project Seminar;
- News Coverage of International Events;
- Other Worlds: Globalization and Culture;
- Population in an Interacting World;
- Race, Class and the Politics of Nature;
- Senior Seminar in Global Studies;
- Society and the Environment: a Growing Conflict;
- Sociology of International Law;
- Sustainable People, Sustainable Planet;
- Theoretical Approaches to Global Studies;
- Topics: Freshman Seminar;
- Topics in African Area Studies;
- Topics in Global Studies;
- Topics in East Asian Studies;
- Topics in European Studies;
- Topics in Latin American Studies;
- Topics in Middle Eastern Studies;
- Topics in Russian Area Studies;
- Topics in South Asian Studies.

10. International agreements No information

11. Contacts (university, faculty, chairs)

Institute for Global Studies

214 Social Sciences

267 19th Ave S

Minneapolis, MN 55455

Phone: (612) 624-9007

Fax: (612) 626-2242

E-mail: igs@umn.edu

Homepage: <http://igs.cla.umn.edu>

Wilfrid Laurier University, Canada



- | | |
|--|---|
| 1. Name of university | Wilfrid Laurier University |
| 2. Year of foundation | Its predecessors are Evangelical Lutheran Seminary of Canada (1911), Waterloo College of Arts (1925), and Waterloo Lutheran University (1960). From the year of 1973 it has been named as Wilfrid Laurier University. |
| 3. Name of faculty where Globalistics is studied | Faculty of Arts, Global Studies Department |
| 4. Name of program and year of beginning | Global Studies |
| 5. Number of students | No information |
| 6. Levels of study (undergraduate, postgraduate, PhD) | Undergraduate (BA) |
| 7. Languages of study | English |
| 8. Short description of program | |

Global Studies is a multidisciplinary department concerned with the study of global societies, issues and events that shape today's world. The department offers a BA in a single or combined honors program in four years. We cultivate an environment that fosters high academic achievement, while also preparing students for a range of professional careers after graduation. Students are expected to work through three areas of inquiry: 'comparative development', 'peace and conflict', and 'globalization and cultures'. In so doing, they are required to progressively develop their knowledge, proceeding from general concepts and issues into more specific and advanced theories, as well as research methodologies. They are also required to apply a multidisciplinary range of conceptual and analytical tools to think in critical, ethical and innovative ways. Finally, students are also required to develop a degree of second language competency and may choose to complete an experiential component in their program of study by participating in a volunteer placement nationally or abroad.

9. Full description

Typical courses that serve as description of the program are:

- Contemporary Global Conflicts and the Search for Peace;
- Contemporary Western Societies: Globalization and Cultures;
- Civil Society, Social Movements and Globalization;
- City Worlds;
- Dialogue and Critique in an Age of Terror;
- Directed Studies;
- Disarming Conflicts;
- Disasters and Development;
- Ecological Citizenship;
- Ethnical Encounters;
- Field Course in Global Studies;
- Global Humanitarianism: the Paradoxes of Giving;

- Global Migrations, Refugees and Diasporas;
- Global Studies: a Case Study;
- Global Studies Fieldwork;
- Global Justice;
- Global Studies in Practice;
- Globalization and Cultures: the Cosmopolitan Village;
- Introduction to Global Studies;
- Islam Culture and Society;
- Methods in Global Studies;
- Narratives of/about Violence;
- Nature, Culture and Development;
- Neoliberalism and its Critics;
- Peace Building in the Shadow of War;
- Peace and Conflict Transformation: an Introduction;
- Post-Field Placement;
- Practices of Development;
- Seminar in Global Studies;
- Senior Field Course in Global Studies;
- Special Topics in Global Studies;
- The Individualized World;
- Theories in Global Studies;
- Theories of Development;
- Tourism and the Globe;
- War and Conflict: an Introduction.

10. International agreements

Wilfrid Laurier University is a current member of the Global Studies Consortium.

11. Contacts (university, faculty, chairs)

Global Studies Department

Faculty of Arts

Wilfrid Laurier University

5-120 Alvin Woods Building

75 University Ave. W.

Waterloo, ON, N2L 3C5

Phone: 519-884-0710 x.3968

Fax: 519-884-8854

Homepage: http://www.wlu.ca/homepage.php?grp_id=148

Part 2.

UNIVERSITIES WITH GLOBAL STUDIES EDUCATION AT MASTER'S AND/OR PHD LEVELS

Erasmus Mundus Global Studies Consortium

- | | |
|--|---|
| 1. Name of university | Erasmus Mundus Global Studies Consortium comprises five leading European Universities: University of Leipzig, London School of Economics and Political Science, Roskilde University, University of Vienna, University of Wroclaw. |
| 2. Year of foundation | 2005 |
| 3. Name of faculty where Globalistics is studied | Global Studies disciplines are offered on the departments of the current consortium's members. |
| 4. Name of program and year of beginning | Global Studies – A European Perspective (2005) |
| 5. Number of students | 71 |
| 6. Levels of study (undergraduate, postgraduate, PhD) | Postgraduate (MA) |
| 7. Languages of study | English, German |

8. Short description of program

It is a two-year program at two different European universities, at each for one academic year. Students can specialize in particular areas of globalization research:

1) at the University of Leipzig on comparative analysis of global entanglements both historically and for the present times, focusing on Eastern Europe, Western Europe, East Asia, sub-Saharan Africa, Northern Africa and the Middle East, Latin America and Northern America;

2) at the London School of Economics on the economic and social history and analysis of economic globalization since around 1400;

3) at the Roskilde University on development studies, global political economy and global governance, political culture and civil society;

4) at the University of Vienna study of international organizations, global history from the year 1500 onwards, as well as area-related analysis of East Asia, sub-Saharan Africa, Central Europe and Latin America;

5) at the University of Wroclaw on the analysis of transformation processes in Central and Eastern Europe, security issues, regional cooperation, communications and the media.

All modules comprise history, cultural, area studies, social or political based approaches upon historical and contemporary patterns of globalization and different societal responses, towards these processes.

9. Full description

Each student needs to complete 11 modules. Scientific disciplines are offered at more than five universities.

Disciplines offered in Leipzig are:

- Global History, International Studies;
- Methods for the Study of Globalization;
- Regions in Globalization;
- Global Studies Colloquium and Summer School;
- Academic Writing and Research Skills;

– World Orders and Cultural Transfers under the Global Condition.

Disciplines offered in London are:

- Economic Change in Global History: Approaches and Analysis;
- The Development and Integration of the World Economy in the 19th and 20th centuries;
- Pre-Modern Paths of Growth: East and West Compared, c. 1000–1800;
- Regions in the Global Economic History;
- Essay (6,000 words) in Global History;
- Winter and Summer School;
- Thesis Discussion, Research Design and Quantitative Methods in Economic History.

Disciplines offered in Roskilde are:

- Global Politics, Global Governance, Regionalization and State Sovereignty;
- Methodological Workshop ‘How to Write a Project’;
- Global Political Economy + Project;
- Summer School;
- Winter School;
- Global Governance – Europeanization & Globalization;
- Globalization, Political Culture, Civil Society & Social Movements;
- Methodological Workshop ‘Comparative Methodology’;
- Thesis Seminar; International Presentations Colloquium.

Disciplines offered in Vienna are:

- Introduction to Global History;
- Theories of Global History;
- Methods of Global History;
- Global History by World Regions;
- Thematic Aspects of Global History;
- Winter and Summer School;
- Theories of Global Study – with emphasis on areas;
- Methods of Global History – with emphasis on areas;
- Global History by Regions – specialize in one region;
- Thematic Aspects of Global History – specialize on one aspect;
- Research Colloquium.

Disciplines offered in Wrocław are:

- Aspects of Globalization & Regionalization;
- International Relations;
- Economic Systems & Political Economy;
- Transformation Economics, Security & IR;
- Society & Politics;
- Research seminar, winter and summer school;
- Globalization: Selected Issues;
- Systems in Transition; International Cooperation and Security;
- Societies in Transition;
- Research Colloquium.

Scientific disciplines offered at Non-European partner universities:

- 1) Dalhousie: Development/Philosophy of Social Sciences; Environment and Development; Comparative Theory;
- 2) Macquarie: Globalization and Sustainable Development; The International System; Globalization and the North-South Relationship;
- 3) Fudan: Modernity in Asia and Europe Compared; Modern Chinese History; International Relations from a Chinese Perspective;

4) JNU: Levels of Regional Development in India; Government and Politics in India; Social Geography;

5) UCSB: Global Culture and Religion; Political Economy, Sustainable Development and the Environment; Contemporary Globalization;

6) Stellenbosch: Conflict in Africa; Global Political Economy ; Negotiating Transition;

7) Addis Ababa: Peace and Security in Africa; Human Rights and Development; New Regionalism in Africa.

The continuous quality of the program is assured through a constant evaluation process by its students, and alumni, the teaching and administrative personnel, as well as by external review.

10. International agreements

The European Master in Global Studies is maintaining a partnership with the following six leading non-European universities: Dalhousie University (Canada), Fudan University (China), Jawaharlal Nehru University (India), Macquarie University (Australia), University of California at Santa Barbara (USA), and University of Stellenbosch (South Africa).

11. Contacts (university, faculty, chairs)

Global and European Studies Institute

Faculty of Social Science and Philosophy

University of Leipzig

Emil-Fuchs-Strasse 1

04105 Leipzig

Germany

Phone: +49 341-97-302-30

Fax: +49341-96-052-61

E-mail: gesi@uni-leipzig.de

Homepage: <http://www.uni-leipzig.de/~gesi/index.php?id=57/>

Hanyang University, South Korea



1. Name of university	Hanyang University
2. Year of foundation	1939
3. Name of faculty where Globalistics is studied	Research Institute of Comparative History and Culture
4. Name of program and year of beginning	Transnational Humanities (2009)
5. Number of students	31
6. Levels of study (undergraduate, postgraduate, PhD)	Postgraduate (MA)
7. Languages of study	No information
8. Short description of program	

The main aim of a program is to train capable transnational intellects by providing a curriculum that crosses the boundaries of nation-states and academic disciplines.

This is the only graduate program in Korea which employs the transnational paradigm, opens up humanistic inquiry and develops free and progressive minds. In addition to the Transnational Humanities curriculum, other learning opportunities and support measures are provided, including the Transnational Humanities Lecture Series, the Flying University of Transnational Humanities (a summer school), cross-registration programs with leading universities worldwide, internships in international organizations, and scholarships for all students.

9. Full description

The postgraduate program in Transnational Humanities entails a flexible process of discovery created together by teachers and students.

Courses in Transnational Humanities are divided into three categories: Introductory, Focus, and Seminar and Text Reading.

Introductory courses are:

- Introduction to Transnational Humanities;
- Globalization: Theory and History;
- Transnational History: Theory and Methodology;
- Translation and Comparison;

Media and Narrative in Transnational Perspectives.

Focus courses are:

- Transnational Cultural Studies;
- Nationalism and Transnationalism;
- Migration and Diaspora;
- Citizenship and Identity Politics in Global Age;
- Social Ethnics in Multicultural Society;
- Border and Area Studies;
- Archaeology of knowledge 1: History, Literature and Society;
- Archaeology of knowledge 2: Science, Technology & Medicine.

Seminar and Text Reading section includes ‘Seminar: Issues in Transnational Humanities 1, 2’ and ‘Multilingual Text Reading 1, 2’.

10. International agreements

The Research Institute of Comparative History and Culture is the only member of the Global Studies Consortium in South Korea. Also it is in a collaborative network with Asia New Humanities Net and International Conference of Labour and Social History.

11. Contacts (university, faculty, chairs)

Research Institute of Comparative History and Culture

Hanyang University, Seoul, South Korea

Phone: +82-2-2220-4624

Fax: +82-2-2298-0542

E-mail: shongshrong@gmail.com

Homepage: <http://rich.ac>

Hitotsubashi University, Japan



1. Name of university	Hitotsubashi University
2. Year of foundation	1920
3. Name of faculty where Globalistics is studied	Institute for the Study of Global Issues
4. Name of program and year of beginning	Global Issues Course (1996)
5. Number of students	No information
6. Levels of study (undergraduate, postgraduate, PhD)	Postgraduate (MA), PhD
7. Languages of study	English, Japanese
8. Short description of program	

The Global Issues Course aims to equip students with both research and professional skills. Its curriculum therefore includes core theoretical and practical courses. The former are required to gain a theoretical understanding of modern global problems and processes, while the latter are designed to teach useful methods for conducting specific analyses and looking for possible solutions. Students can enroll in both kinds of courses according to their research interests and needs.

The Global Issues Course is unique and has its features. First of all, the course turns conventional postgraduate sociological education on its head by first identifying concrete issues of concern and then trying to unravel the often intricate contexts in which they occur. In order to do that, students construct analytical frameworks and look into existing bodies of sociological knowledge and research methodology such as they find necessary. Secondly, during their studies, students are expected to not only theorize about the social problems they are investigating, but also to formulate practical solutions for them. Moreover, it is taken into account that many of the biggest social problems of our age are occurring in Asia, the Middle East, Africa and Latin America. That is why the Institute provides an opportunity for students to free themselves from traditional Euro-centric ways of thinking to a necessary degree and be more receptive to the peculiarities of local contexts in their research.

To conclude, the program follows three basic principles: an issue-focused methodology, solution-oriented investigation, a de-Eurocentric approach.

9. Full description

The courses offered by the faculty are divided into different blocks: Anthropology, Economics, Psychiatry, Political Science, Sociology, Geography, Environmental Science, Television Production, Media Studies, and Astronomy.

10. International agreements

Institute for the Study of Global Issues is a founding member of the Global Studies Consortium, an international network of graduate teaching programs on global studies.

11. Contacts (university, faculty, chairs)

Institute for the Study of Global Issues

Graduate School of Social Science, Hitotsubashi University

2-1 Naka Kinitachi, Tokyo 186-8601, Japan

Phone: +81-42-580-9098, **E-mail:** KOBAYASHI.Miyuki@r.hit-u.ac.jp

Homepage: <http://isgi.soc.hit-u.ac.jp/>

University of Illinois at Urbana-Champaign, USA



- | | |
|--|--|
| 1. Name of university | University of Illinois at Urbana
Champaign |
| 2. Year of foundation | 1867 |
| 3. Name of faculty where Globalistics is studied | College of Liberal Arts & Sciences,
Center for Global Studies |
| 4. Name of program and year of beginning | Global Studies (International Studies) |
| 5. Number of students | No information |
| 6. Levels of study (undergraduate, postgraduate, PhD) | Postgraduate (MA) |
| 7. Languages of study | English |
| 8. Short description of program | |

Global Studies is an interdisciplinary program of study that provides a strong foundation in the analysis of contemporary global issues through coursework, research and experiences in the field. The Global Studies program of study was developed in response to the growing demand for knowledge, skills, and values to successfully navigate concerns at international and global levels.

9. Full description

Program courses include required core courses, as well as topics-based seminars and seminars abroad offered by the Global Studies faculty and faculty from other departments on campus.

These courses are:

- Introduction to Global Studies;
- Undergraduate Open Seminar;
- Field Work Preparation;
- Foundations to Global Studies Research;
- Governance, Development;
- Global Studies Foundation Seminar;
- Global Studies Seminar Abroad;
- International Diplomacy and Negotiation;
- Research Methods 1;
- Research Methods 2;
- Special Topics;
- Geography of International Conflicts;
- Natural Disasters;
- Energy Systems;
- Resource Conflicts;
- War, Military Institutions, and Society since 1815;
- Math Issues in National Security;
- Nuclear Weapons & Arms Control;
- Introduction to International Security;

- Art, Propaganda, and War;
- Comparative Political Economy;
- Ethnic Conflict;
- The Ethnics of War and Peace;
- Women in Muslim Societies;
- Energy & Security;
- Writing on Technology & Security;
- Military & Civilian Uses of Nuclear Energy;
- Seminar on Security.

10. International agreements No information

11. Contacts (university, faculty, chairs)

College of Liberal Arts & Sciences – Global Studies

International and Global Studies

703 S. Wright Street, 3rd Floor

Champaign, IL 61820

Phone: (217) 333-0178

Fax: (217) 265-7555

E-mail: globalstudies@illinois.edu

Homepage: <http://www.globalstudies.illinois.edu/>

Rutgers, the State University of New Jersey, USA



1. Name of university	Rutgers, The State University of New Jersey
2. Year of foundation	1766
3. Name of faculty where Globalistics is studied	Division of Global Affairs
4. Name of program and year of beginning	Global Affairs (MA), Global Affairs (PhD)
5. Number of students	90
6. Levels of study (undergraduate, postgraduate, PhD)	Postgraduate (MA), PhD
7. Languages of study	English

8. Short description of program

The Master's degree, with a more practical emphasis, prepares students to work in the public and private international sectors, as well as in non-governmental organizations, think-tanks, foundations, and media companies focusing on global issues.

The Ph.D., more academically oriented, is geared towards preparing future scholars eager to adopt and cultivate a planetary perspective on global issues from an interdisciplinary and multicultural standpoint. The Ph.D. in Global Affairs can also be an excellent track for policy jobs at the global level requiring advanced expertise.

9. Full description of program

Rutgers University in Newark is the only institution in the United States to offer both Master of Science and Doctoral degrees in Global Affairs. The main goal of the graduate Division of Global Affairs (DGA) is to provide intellectual and practical training in core areas, particularly in the fields of security, ethics, development and the environment. The program offers its ethnically and internationally diverse student population an interdisciplinary and multicultural perspective on global issues.

Cutting across academic fields, DGA brings together faculty from Arts and Sciences (political science, history, sociology, economics, anthropology and others), the School of Law (international law, international organizations, human rights law, comparative jurisprudence), the Business School (global political economy, international business and others), the School of Criminal Justice, the School of Nursing (in particular global health) and the School of Public Affairs and Administration. The program draws on the expertise of both academics and practitioners with a curriculum built around four concentrations: Global Governance, Global Business and Economics, Conflict and Human Rights, and Human and Environmental Security.

10. International agreements

The program takes part in the Global Studies Consortium, Federation of Balkan American Association, FRANCE24 Blok, and Centers for Global Advancement and International Affairs.

11. Contacts (university, faculty, chairs)

Division of Global Affairs

Rutgers, the State University of New Jersey

177 University Avenue, Room 220A, Conklin Hall, Newark, NJ 07102

Phone: (973) 353-5585 **Homepage:** <http://dga.rutgers.edu/>

University of Pittsburgh, USA



1. Name of university	University of Pittsburgh
2. Year of foundation	1787
3. Name of faculty where Globalistics is studied	Global Studies Center, World History Center
4. Name of program and year of beginning	Global Studies, World History (2012–2013)
5. Number of students	73
6. Levels of study (undergraduate, postgraduate, PhD)	Postgraduate, PhD
7. Languages of study	English

8. Short description of program

Through the graduate and PhD programs, students develop an awareness of major currents of global change and the issues it raises, the capacity for effective communication across cultural and linguistic boundaries, and personal adaptability to diverse cultures.

Programs also encourage students to take advantage of the many international learning opportunities available at the University of Pittsburgh. Students are encouraged to enroll in a study or service abroad program or participate in an international internship.

9. Full description

Global Studies students choose one of the six concentrations – *Sustainable Development; Global Economy and Global Governance; Changing Identities in a Global World; Communication, Technology, and Society; Conflict and Conflict Resolution; Global health* – and unite it with the study of a particular region and a language of that region.

The courses are offered by various departments and schools across the University. Some examples of core courses in Global Studies are listed below:

- 1) *Sustainable Development concentration:*
 - Anthropology of Food;
 - Biocultural Anthropology;
 - Ecology;
 - Geology;
 - Geotechnical Analysis;
 - Global Environmental Politics etc.
- 2) *Global Economy and Global Governance concentration:*
 - Environmental Economics;
 - Economics for Public Affairs;
 - Intermediate Macroeconomics;
 - Intermediate Microeconomics;
 - International Finance;
 - International Marketing etc.
- 3) *Changing Identities in a Global World concentration:*
 - Anthropology of Education;

- Cultural Sociology;
- Marriage;
- Nationalism;
- Religion in Early America;
- Social Movements etc.
- 4) *Communication, Technology, and Society concentration:*
 - Advanced Sociolinguistics;
 - Cross-cultural Communication;
 - Introduction to World Art;
 - Languages of the World;
 - Language, Gender and Society;
 - World Literature in English;
- 5) *Conflict and Conflict Resolution concentration:*
 - American Foreign Policy;
 - Conflict and War Theory;
 - International Organized Crime;
 - Peace Movements & Peace Education;
 - Principles Homeland Security;
 - Terrorism etc.
- 6) *Global Health concentration:*
 - Biopsychology of Health Disparities;
 - Epidemiology Infectious Diseases;
 - Gender and Development;
 - Introduction to Population Problems;
 - Theories of Health Behavior & Health Education.

10. International agreements

The World History Center maintains close relations with the Network of Global and World History Organizations (NOGWHISTO) and its affiliates, including the World History Association, the Asian Association of World Historians, the African Network in Global History, and the European Network in Universal and Global History.

The World History Center and the Global Studies Center both hold a joint membership in the Global Studies Consortium.

11. Contacts (university, faculty, chairs)

Global Studies Center

University of Pittsburgh
 University Center for International Studies
 4100 Wesley W. Posvar Hall
 230 South Bouquet Street
 Pittsburgh, PA 15260
Phone: (412) 648-5085
Fax: (412) 624-4672
E-mail: global@pitt.edu
Homepage: <http://www.ucis.pitt.edu/global/>

World History Center

University of Pittsburgh, Department of History
 3900 Wesley W. Posvar Hall
 230 South Bouquet Street
 Pittsburgh, PA 15260
Phone: (412) 624-3073, **Fax:** (412) 648-9074 **E-mail:** worldhis@pitt.edu
Homepage: <http://www.worldhistory.pitt.edu/>

Sophia University, Japan



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|--|---------------------------------------|
| 1. Name of university | Sophia University |
| 2. Year of foundation | 1913 |
| 3. Name of faculty where Globalistics is studied | The Graduate School of Global Studies |
| 4. Name of program and year of beginning | Global Studies (2006) |
| 5. Number of students | 59 |
| 6. Levels of study (undergraduate, postgraduate, PhD) | Postgraduate (MA, PhD) |
| 7. Languages of study | English, Japanese |
| 8. Short description of program | |

The MA in Global Studies examines world systems, transnational processes, and global-local interactions from perspectives of anthropology, history, political science, religious studies and sociology. Students take two *Foundational Courses* to acquire theoretical concepts and methodological approaches for the study of global phenomena. A range of thematic *Elective Courses* enables students to explore global issues and phenomena from an area-based perspective that draws on concrete cases in Japan, China, and the rest of Asia. Students proficient in Japanese may also choose from a selection of area studies and international relations courses taught in Japanese that focus on Southeast Asia, Latin America, and the Middle East. Study of Japanese and other languages relevant for a student's research and future career is strongly encouraged.

The PhD in Global Studies is designed for the advanced study of specific areas or locales in the context of global processes and transnational connections. While the questions and lines of inquiry in global studies are interdisciplinary, research and writing agendas emphasize methods and concepts from the disciplines of history, political science, and sociology. The degree prepares candidates for academic positions in area, international, and global studies programs, or for research positions in foundations, NGOs, and companies that need advanced analyses of countries and regions in global contexts.

The doctoral course, which requires a three-year residency, focuses on the writing of a dissertation. While no course work is required, candidates participate in workshops and other program activities and may, in consultation with their dissertation supervisor, attend courses. Candidates first pass several qualifying exams and then, upon successful defense of a dissertation prospectus, proceed on to dissertation research and writing. To ensure close guidance of the dissertation, only a few candidates are admitted each year.

9. Full description

Academic disciplines in curriculum represent three areas of study: social science (55 per cent), humanities (30 per cent), and business studies (15 per cent). MA in Global Studies consists of 37 courses. About a half is cross-listed courses from other graduate programs that conducted in Japanese but readings are mostly or entirely in English.

The Global Studies courses are:

- Comparative Politics;
- Conflicts and Security;

- Diplomatic History;
- Global Culture;
- Global History;
- Global Issues;
- Global Politics;
- Globalization and Institutional Change;
- Globalization and Migration;
- Globalization and Nation States;
- Globalization and Society;
- Globalization and Popular Religion;
- Graduation Project;
- Introduction to Global Studies 1;
- Introduction to Global Studies 2;
- Master's Thesis;
- Research Guidance;
- Thesis Guidance;
- Thesis Seminar.

The school seeks to train scholars and specialists capable of working effectively in academia, research and other institutions that tackle global issues.

10. International agreements

The Graduate School of Global Studies is a current member of the Global Studies Consortium.

11. Contacts (university, faculty, chairs)

Graduate Program in Global Studies

Sophia University

7-1 Kioi-cho, Chiyoda-Ku

Tokyo 102-8554, Japan

E-mail: d-wank@sophia.ac.jp

Homepage: <http://grad fla.sophia.ac.jp/>

Berlin Graduate School for Transnational Studies, Germany



- | | |
|--|---|
| 1. Name of university | Berlin Graduate School for Transnational Studies is a cooperative project of three outstanding scientific institutes and institutions: <i>Free University of Berlin</i> , <i>Hertie School of Governance</i> , and <i>Social Science Research Center Berlin</i> . |
| 2. Year of foundation | 2008 |
| 3. Name of faculty where Globalistics is studied | Berlin Graduate School for Transnational Studies |
| 4. Name of program and year of beginning | The PhD program at BTS |
| 5. Number of students | 81 |
| 6. Levels of study (undergraduate, postgraduate, PhD) | PhD |
| 7. Languages of study | English |
| 8. Short description of program | |

The program is strategically placed at the intersection of political science, economics, history, law and sociology, where the most exciting changes and debates in an area of globalization and fragmentation take place.

The PhD program consists of three years of study, starting in September of each year. The bulk of the workload for candidates will take the form of independent thesis research. Apart from this, all candidates are required to successfully complete content-oriented survey courses, colloquia on research methods, and multidisciplinary skills workshops. Candidates will also be required to present the results of their research regularly at research colloquia and at academic conferences.

9. Full description

The course takes 3 years to complete.

The courses and other academic opportunities offered at BTS are:

- Colloquium: Research Design;
- Colloquium: Research in Progress;
- Colloquium: Research Results;
- Independent Research on Dissertation Project;
- Methods on Qualitative or Quantitative Research;
- Survey Course on Transnational Studies;
- Transferable Skills: English Academic Writing plus Another Transferable Skills Workshop;
- Transferable Skills: Two Different Workshops;
- Teaching Assistance or Cooperation with a Third Party Funded Project at One of the Partnering Institutions.

Workshops cover methods on quantitative and qualitative research, as well as transferable skills. BTS always provides its PhD candidates with the opportunity to indicate further ideas for workshops they would be interested in and plans are made accordingly.

Regular workshops include:

- Discourse Analysis;
- English Academic Writing;
- Interview Techniques;

– Qualitative Comparative Analysis;
University Didactics etc.

10. International agreements

Berlin Graduate School for Transnational Studies is currently a member of the Global Studies Consortium. Also it hosts an annual PhD workshop in cooperation with Hebrew University of Jerusalem and the Peace Research Institute Frankfurt.

11. Contacts (university, faculty, chairs)

Berlin Graduate School for transnational Studies

Free University of Berlin

Ilhnestr. 26

14195 Berlin

Germany

Phone: +49 (0) 30-838-57-052

Fax: +49 (0) 30-838-57-096

E-mail: info@transnationalstudies.eu

Homepage: <http://www.transnationalstudies.eu>

Part 3

UNIVERSITIES WITH GLOBAL STUDIES EDUCATION AT BACHELOR'S, MASTER'S AND/OR PHD LEVELS

Aarhus University, Denmark



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|---|--|
| 1. Name of university | Aarhus University |
| 2. Year of foundation | 1928 |
| 3. Name of faculty where Globalistics is studied | Department of Political Science and Government |
| 4. Name of program and year of beginning | Political Science, Social Science |
| 5. Number of students | No information |

6. Levels of study (undergraduate, postgraduate, PhD)

The department has the overall responsibility for the Bachelor's and Master's degree (cand.scient.pol.) programs in Political Science, the Master's degree (cand.soc.) programs in Social Science, and the subsidiary subject programs in Social Science. The department also contributes to the Flexible Master of Public Governance (FMOL).

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|------------------------------|-----------------|
| 7. Languages of study | English, Danish |
|------------------------------|-----------------|

8. Short description of program

The program includes two semesters of full time course work, one term in which students carry through a project or international internship or follow elective courses, and a final thesis written under supervision in the fourth semester.

The core courses are modern global history, global society, international political economy, global justice, international relations and organizations, and international project management.

9. Full description of program

The first year of the MA program consists of six core classes, taught over the first two semesters. The first semester comprises Modern Global History, International Political Economy and Global Society, which provide the foundation for the second semester classes on Global Justice, International Relations and Organizations, and Project Management.

In the second year, the students are provided with several options. They can choose to put into practice the skills and knowledge they acquired in the first year by finding an internship or they can continue with their academic track and write a self-researched project paper. Both options provide the opportunity for the students to take optional courses in the third semester in order to deepen their interest in a certain region or topic.

An internship is good a way to test one's interest in a variety of career fields and to gain practical experience. Not surprisingly, a majority of IS students choose this option. The internship takes place in an organization with an international focus, ranging from NGOs to embassies to businesses or international think tanks.

10. International agreements

Aarhus University has a bilateral agreement with the University of Greifswald, Germany.

11. Contacts (university, faculty, chairs)

Department of Political Science and Government

Aarhus University, BartholinsAllé 7, Dk-8000 Aarhus C

Phone: +45-871-50000, **E-mail:** statskundskab@au.dk, **Homepage:** <http://ps.au.dk/en/>

Australian National University, ANU, Australia



- | | |
|--|--|
| 1. Name of university | Australian National University, ANU |
| 2. Year of foundation | 1946 |
| 3. Name of faculty where Globalistics is studied | School of Politics and International Relations |
| 4. Name of program and year of beginning | International Relations, Globalization |
| 5. Number of students | No information |
| 6. Levels of study (undergraduate, postgraduate, PhD) | Undergraduate (BA),
Postgraduate (MA) |
| 7. Languages of study | English |

8. Short description of program

The School of Politics and International Relations has produced path-breaking work on political parties, public administration, trade unions, pressure groups, elections and political behavior. For many years the School has also focused on Australian and international public policy and public sector management and in 2002 was a foundation member of the Australian and New Zealand School of Government (ANZSOG). It houses the innovative Australian National Internships Program, and also has a successful Washington Internships Program.

The major areas of research, teaching and postgraduate supervision are: Australian Politics; Comparative Politics; International Relations; Political Policy; Political Theory.

9. Full description of program

Typical courses for the program in International relations are:

- Aid and Development Policy;
- Culture and Development;
- Globalization: Theories, Debates, Issues;
- History of Globalization;
- Human Rights and Human Responsibility;
- International Migration;
- Migration, Refugees and Development;
- The Political Economy of Globalization.

10. International agreements

Nowadays the school takes part in two internship programs: Australian National Internship Program, and Washington Internships Program.

11. Contacts (university, faculty, chairs)

School of Politics and International Relations

Australian National University, Canberra

Phone: +61-2-612-55-111 **Fax:** 519-884-8854

Postal address:

School of Politics and International Relations

Australian National University

Haydon-Allen Building #22, Acton ACT 0200

Homepage: <http://socpol.anu.edu.au/>

University of California at Santa Barbara, USA



- 1. Name of university** University of California at Santa Barbara
- 2. Year of foundation** In 1891 Anna Blake School was established.
In the year of 1944 it joined the University of California.
- 3. Name of faculty where Globalistics is studied** College of Letters & Science
- 4. Name of program and year of beginning** Global & International Studies Program (1999)
- 5. Number of students** 12–15 graduate students each year
- 6. Levels of study (undergraduate, postgraduate, PhD)**

The program has an interdisciplinary major within the Global and International Studies Program, a highly successful MA in Global Studies, a PhD emphasis in Global Studies, and anticipates implementing a PhD in Global Studies in 2014–2015.

- 7. Languages of study** English

8. Short description of program

The program provides an undergraduate major that is distinctive in its emphasis on transnational processes and interactions that bring the world together across traditional national boundaries.

The MA degree is intended to provide an understanding of the economic, political, social, and cultural forces that are shaping global organizations.

Interdisciplinary PhD emphasis in Global Studies allows students to design a course of study focused on international and transnational issues, processes and flows.

9. Full description of program

The major includes two introductory gateway courses on global history, culture, and ideology on global socioeconomics and politics and is built around three upper-division core courses that provide a coherent introduction to global culture and ethnics, global ideologies and world order, and global economy and development. It also affords students an opportunity to take additional courses offered by other departments and programs in the university: three in global issues and three in one particular region of the world (Africa, the Middle East, South/Southeast Asia and the Pacific, East Asia, Europe and Eurasia, Latin America, or North America). Moreover, it requires 3 years of language study, which can be fulfilled all in one language or by taking 2 years of one language and an additional year of a second language. To sum up, the Global Studies major provides a well-rounded liberal arts degree that will help prepare students for a variety of careers in the international arena.

The two-year M.A. program combines courses from the social sciences and humanities with practical training and real-world experience. Students typically spend the summer of their first year and fall quarter of their second year abroad, taking courses and doing internships with non-governmental organizations, governmental bodies, or businesses. The program is developing partnerships with other globally-oriented educational institutions abroad, and a range of

international NGOs, for study and intern placements. Students will also take two policy-oriented workshops designed to simulate real-life decision-making situations. Non-credit workshops will also be available for interested students, providing opportunities to learn about such practical matters as grant writing and foundation funding, tracking organizational finances, information management, and computer-based technologies.

The curriculum consists of three courses per quarter. The first year includes required courses on Organizational Policy and Management, Micro/Macro Economics, International Economics, Global Trade and Finance, Transnational Forces and Political Systems, Global Governance and World Order, Theories of Intercultural Understanding, and Global Organizations and Civil Society. Students are also required to take a course on Research Methods in Global & International Affairs, participate in a policy analysis and exercise seminar, and attend a one-unit seminar that focuses on contemporary issues and internship preparation.

The second year allows students to choose courses that provide background in particular cultural/geographic regions, and focus on a career emphasis in either Global Social and Economic Development or Global Culture and Human Rights. Students are also required to take courses in an area specialization of their choice: East Asia, South and Southeast Asia, the Americas, the Middle East, Africa, or Europe. A course on Managing Development Organizations, Non-Profits and Other NGOs: Theory and Practice is also offered as an elective. The second year culminates with a required policy workshop.

PhD emphasis students must be enrolled in good standing in one of the following departments: Anthropology, Communications, Comparative Literature, Education, English, Feminist Studies, Film and Media, Geography, History, Political Science, Religion, Sociology. Each student receives guidance and mentoring from the faculty as they prepare their dissertations.

10. International agreements

No information

11. Contacts (university, faculty, chairs)

Global & International Studies Program

University of California

Social Sciences & Media Sciences Building, 2nd floor

Mail Code 7065

Santa Barbara, CA 93106-7065

Phone: 805-893-46-68

Fax: 805-893-80-03

E-mail: webmaster@global.ucsb.edu

Homepage: <http://www.global.ucsb.edu/>



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|--|---|
| 1. Name of university | The New School |
| 2. Year of foundation | 1919 |
| 3. Name of faculty where Globalistics is studied | Eugene Lang College
The New School for Public Engagement |
| 4. Name of program and year of beginning | Global Studies (BA), Global Political
Economy and Finance (MA) |
| 5. Number of students | No information |
| 6. Levels of study (undergraduate, postgraduate, PhD) | Undergraduate (BA),
postgraduate (MA) |
| 7. Languages of study | English |

8. Short description of program

Global Studies is offered as a major to undergraduate students at Eugene Lang College and the New School for Public Engagement.

The Global studies major offers unique opportunities for sharing experiences and coursework with programs in urban studies, media studies, and environmental studies. Global studies majors can combine their degree with one of a number of planned and existing minors (such as Middle East studies, religious studies, and gender studies) or, with their advisor's permission, pursue a double major. The curriculum is designed to allow undergraduates to study and work at the intersections of social sciences (political science, anthropology, sociology, and economics), human rights, and media. The major can also make up part of a five-year combined bachelor's and master's program leading to a graduate degree in international affairs, media studies, economics, and other disciplines. Experience on the ground is an important aspect of global studies, and the major gives students the chance to apply their knowledge in internships and fieldwork in New York and abroad.

The MA in Global Political Economy and Finance provides students with a sophisticated understanding of the world economy in historical context, the political economic analysis of the dynamics of contemporary world capitalist society, and state-of-the art tools of political economic and financial analysis.

9. Full description

The courses capitalize on the expertise of the university's faculties of social science, languages, media studies, design, management, and urban policy.

Global Studies subjects offered by Eugene Lang College are:

- Arabic;
- Architecture;
- Anthropology;
- Anthropology & Archaeology;
- Art/Design;
- History;
- Art/Design History & Theory;
- Art, Media & Technology;
- Chinese Mandarin;
- Communication;
- Comp, Scoring;
- Criticism and Writing;
- Cultural Studies;
- Dance;
- Design Strategies;
- Design Studies;
- Economics;

- Education Studies;
- Environmental Studies;
- Fashion Studies;
- Food Studies;
- Film;
- First Year Writing Program;
- French;
- German;
- Global Studies;
- History;
- Interdisciplinary Science;
- Integrated Arts;
- International Affairs;
- Italian;
- Japanese;
- Jazz;
- Jazz Music History;
- Latin;
- Literary Studies;
- Literature;
- Lit Studies: Literature;
- Lit Studies: Writing;
- Media Studies;
- Music;
- Music History;
- Philosophy;
- Photography;
- Politics;
- Portuguese;
- Psychology;
- Religion;
- Russian;
- Sign Language;
- Sociology;
- Social Science;
- Spanish;
- Special Design Studies;
- The Arts;
- Theater;
- Urban Studies;
- Visual Studies;
- Voice and Opera;
- Wellness;
- Workshops;
- Writing;
- Yiddish.

Global Studies Courses offered by the New School for Public Engagement are:

- Africa, Development & Diaspora;
- Arab Awakening;
- Collaborative Research Seminar: International Human Rights;
- Comparative Constitutional Law;
- CRS: Genocide & Action;

- CRS: Refugee Experience;
- CRS: Skills for Global Change – Environmental Justice and Resource;
- Conflicts; CRS: the Politics of Immigration in Action;
- Death and Rebirth: Genocide and Reconstruction in Rwanda;
- Directed Research;
- Displacement, Asylum, Migration;
- Dwelling in Dilemma – Chinese Middle Class and Cities;
- Economic Crisis and its Global Consequences;
- Europe Crisis & World Economy;
- Food, Global Trade & Development;
- Foundations of Gender Studies;
- Gender & the Middle East;
- Global Gender and Sexuality;
- Global Justice;
- Global Outlaws – Law and International;
- Governing the Global;
- Human Rights and Transitional Justice;
- Hungering for Opportunities: Food and Migrations;
- India and China Interactions;
- International Environmental Governance;
- Migrant City;
- Non-Western Approaches;
- Representing the Global;
- Social Movements;
- The Science and Politics of the Atom Bomb;
- The US and Latin America;
- Understanding Global Capitalism;
- War & Conflict in the 21st Century;
- Whose Heritage: Contested Cultural Sites.

To sum up, graduates are prepared to pursue international careers in government and international organizations, nonprofit management and development, communication media, and education.

The MA program in Global Political Economy and Finance consists of seven required courses and three electives. There is no written or comprehensive examination. The MA degree is awarded for successful completion of the required 30 credits.

The courses offered are:

- Financial Economics;
- Financial Markets and Valuation;
- Graduate Microeconomics;
- Historical Foundations of Political Economy, Internship;
- Introduction to Econometrics;
- Mathematics for Economics;
- Mentored Research;
- Principles of Financial Engineering;
- World Political Economy.

10. International agreements

The New School is currently a member of Global Studies Consortium.

11. Contacts (university, faculty, chairs)

The New School

66 West 12th Street, New York, NY 10011

E-mail: globalstudies@newschool.edu

Homepage: <http://www.newschool.edu/interdisciplinary-ugrad/global-studies.aspx>

University of North Carolina at Chapel Hill, USA



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

- | | |
|--|--|
| 1. Name of university | University of North Carolina at Chapel Hill |
| 2. Year of foundation | 1789 |
| 3. Name of faculty where Globalistics is studied | FedEx Global Education Center |
| 4. Name of program and year of beginning | International Studies (BA),
Global Studies (MA) |
| 5. Number of students | 500 |
| 6. Levels of study (undergraduate, postgraduate, PhD) | Undergraduate (BA),
postgraduate (MA) |
| 7. Languages of study | English |
| 8. Short description of program | |

Global Studies program offers students the opportunity to develop an appreciation for and fuller understanding of the global issues within the context of a diverse, flexible, interdisciplinary curriculum in the tradition of the University's liberal arts focus. In order to do this each student is supposed to take a total of 10 courses and must choose a theme and area studies region in which to concentrate.

9. Full description

Courses deal with topics as diverse as the global impact of nineteenth century European colonialism; globalization and economic change; migration and diasporas; environment and human rights; global health and human reproduction; global and local social movements; and technology and patterns of cultural transmission. Such an integrated learning environment includes courses in modern foreign languages, enabling the student to develop the ability to interact and learn in a foreign environment; courses in a thematic concentration allowing the student a framework for developing critical questioning and reasoning skills; and courses with a regional focus, encouraging students to develop a fuller awareness of the ways in which global forces shape and transform regional political, economic and cultural change.

There are core courses which are offered by the university's staff:

- Agriculture, Food and Supply;
- Anthropological Perspectives on Cultural Diversity;
- Cultural Geography;
- Environmental Conservation;
- Environment and Labor in the Global Economy;
- Environment and Society;
- Ethics of Peace, War, and Defense;
- Gender and Global Change;
- Geography of the Developing World;
- Globalizing Organizations;
- Human Societies;
- International Communication and Comparative Journalism;
- International Relations and World Politics;
- Introduction to Comparative Politics;
- Introduction to World Music;
- Language and Nationalism;

- Later Islamic Civilization & Modern Muslim Cultures;
- Literature and Race, Literature and Ethnicity;
- Local Cultures, Global Forces;
- Local Places in a Globalizing World;
- People and Places;
- Population Problems;
- Sociology of Politics;
- Survey of International Development of the Economy;
- World Art;
- World Drama;
- World Literatures in English;
- World Regional Geography;
- The World since 1945.

There are also theme courses and area courses. Theme courses include courses in different areas: International Politics, Global Economy, Global Health & Environment, and Transnational Cultures. The block of area courses approved by individual area studies curricula. All they have geographical content: Africa, Asia, Latin America, The Middle East, Eastern Europe, and Western Europe.

To conclude, the curriculum in Global Studies lays the groundwork for successful careers with an international dimension in a wide range of fields.

10. International agreements

The staff is currently in consultation with two existing academic partners, King's college and the National University of Singapore, to establish exchange opportunities for students at the graduate level.

11. Contacts (university, faculty, chairs)

The FedEx Global Education Center

The University of North Carolina at Chapel Hill

301 Pittsboro Street

Chapel Hill, NC 27599

Phone: (919) 962-5442

Fax: (919) 962-8485

E-mail: laram@email.unc.edu

Homepage: <http://globalstudies.unc.edu/>

Contributors to the Volume

Gilbert AHAMER is localized in multiple working cultures: Academy of Sciences, Universities, Environmental Administration and International Consulting. His affiliations have pushed him to look through ever new lenses. This experience acts as a motivation to enable students to tackle a high diversity of perspectives, disciplines and paradigms.

David BAKER studied his PhD in Big History at Macquarie University in Sydney under David Christian. He now teaches Big History at the universities of Amsterdam, Eindhoven, and Rotterdam alongside Fred Spier and Esther Quaedackers. His research interests include Universal Darwinism, collective learning, the rise of complexity, and demographic-structural theory. He is a co-editor of the 2012 International Big History Association (IBHA) Conference Proceedings, together with Andrey Korotayev, Leonid Grinin, and Esther Quaedackers. He is also engaged with the IBHA Publications Committee in setting up a *Big History* academic journal.

Valentina M. BONDARENKO is a Senior Research Professor at the Russian Academy of Sciences Institute of Economics, Director of the N. D. Kondratieff International Foundation, the author of the new methodology for cognition of regularities in the human community development. Her most widely known publications include: 'Contours of the New Methodology for Cognition of Regularities in the Human Community Development' (2002, in Russian); 'Warfare and International Security: Future Perspective' (2006); *Forecasting the Future: A New Paradigm* (2008, in Russian); 'New Methodological Approach to Forming Russia Development Strategy' (2008, in Russian); 'Innovations, Information Society and Long-Term Development Strategy of Russia' (2009, in Russian); 'Contours of the Economy of the Future and the Present: Two Paradigms of Development' (2011, in Russian); 'Outlines of the Future or, Are There Any Chances for A Transition to Sustainable and Crisis-Free Development?' (2011, in Russian).

Alexander N. CHUMAKOV, PhD, Professor, Head of Philosophy Department at Financial Academy under the Government of Russia, First Vice-President of the Russian Philosophical Society. His professional interests lie in Global Studies, social philosophy, global problems and ecology. Among his numerous scholarly publications are the following monographs: *The Philosophy of Global Problems* (1994, in Russian; 1996, in Chinese); *Globalization. The Outlines of Integral World* (2005, 2nd edition – in 2009, in Russian); *The Essence of Contemporary Globalization* (2007, in Russian); *Philosophy of Globalization. Selected articles* (2010).

Olukayode A. FALEYE is a Lecturer in the Department of History and International Studies, College of Humanities, Joseph Ayo Babalola University, Ikeji Arakeji, Osun State, Nigeria.

Leonid E. GRININ is Research Professor and the Director of the Volgograd Center for Social Research, as well as the Deputy Director of the Eurasian Center for Big History & System Forecasting and Senior Research Professor at the Institute for Oriental Studies of the Russian Academy of Sciences in Moscow. He is the Editor-in-Chief of the journal *Age of Globalization* (in Russian), as well as a co-editor of the international journals *Social Evolution & History* and the *Journal of Globalization Studies*. Dr. Grinin is the author of more than 360 scholarly publications in Russian and English, including six monographs. These monographs include *Philosophy, Sociology, and the Theory of History* (2007, in

Russian); *Productive Forces and Historical Process* (2006, in Russian); *State and Historical Process* (3 vols, 2009–2010, in Russian); *Social Macroeolution: World System Transformations* (2009, in Russian; with A. Korotayev); *Macroeolution in Biological and Social Systems* (2008, in Russian; with A. Markov and A. Korotayev); *Global Crisis in Retrospective: A Brief History of Upswings and Crises* (2010, in Russian; with A. Korotayev); *The Evolution of Statehood: From Early State to Global Society* (2011); *The Cycles of Development of Modern World System* (2011, in Russian; with A. Korotayev and S. Tsirel); *From Confucius to Comte: The Formation of the Theory, Methodology and Philosophy of History* (2012, in Russian); *Macrohistory and Globalization* (2012); *Cycles, Crises, and Traps of the Modern World-System* (2012, in Russian; with A. Korotayev).

Anthony HOWELL is currently a doctoral candidate at the Geography Department at UCLA and holds advanced degrees in both Statistics (UCLA – 2012) and Geography (Michigan State University – 2009). Trained as a statistician, urban-economic geographer and China specialist, Anthony's research combines applied statistical approaches with the aid of GIS techniques and mapping of spatial relationships to develop new empirically-driven theoretical frameworks that are capable of informing social and economic policy. His dissertation research, supported by a 2012–2013 Fulbright scholarship, is a microeconomic analysis that presents new, critical information highlighting the short- and long-run impacts of Chinese industrial policy on innovation, knowledge spillovers and firm performance. Prior to enrolling at UCLA, Anthony attended Michigan State University for both undergraduate and graduate studies. At MSU, Anthony participated in nine study/research abroad programs that provided diverse opportunities to study Spanish and Chinese languages, volunteer with orphans and the disabled, intern, and carry out research projects in countries ranging from Mexico to Ireland, Czech Republic, United Arab Emirates and China. In summer 2006, Anthony participated in an undergraduate research opportunity that took him for the first time to China, where he examined rural-urban migration patterns at the Chinese Academy of Sciences in Beijing. The culmination of Anthony's experiences in China were life-changing, both personally and professionally. Since 2006, Anthony has accumulated two years of experience living in China, dedicating much of his time to language acquisition, and researching issues related to migration, inequality and regional growth.

Ilya V. ILYIN is the Dean of the Faculty of Global Studies, the Head of the Department of Globalistics, Lomonosov Moscow State University. He is the author of over 200 scholarly publications on Globalistics, including such books as *Introduction to Global Ecology* (2009, in Russian; with A. Ivanov), *Evolutionary Globalistics* (2010, in Russian; with Arkadi Ursul), *Introduction to Paleoglobalistics* (2011, in Russian; with Ruslan Gabdullin and Alexander Ivanov).

Hafiz KHAN is a Senior Lecturer in Applied Statistics in the Department of Economics and International Development and is a demographer at the Centre for Research into the Older Workforce (CROW) within the Middlesex University Business School. He is also visiting Research Fellow in Demography at the Oxford Institute of Population Ageing, The University of Oxford, UK. Dr. Khan trained as a statistician at the University of Chitragong and later as a demographer at several institutions – Edinburgh Napier University, the International Institute for Applied Systems Analysis (IIASA) in Austria, the National University of Singapore and lastly at the University of Oxford, UK. Dr. Khan's principal research interests lie in the broader areas of population and development including population ageing and its consequences, poverty and vulnerability, microfinance; development

issues, reproductive health and family planning in developing countries. For a number of years he has also worked on the demographic issues of Bangladesh especially on the trends, determinants and differentials of fertility as well as elderly care and support. He has written extensively in population related issues and has over 90 academic publications including books and journals.

Hae KIM is Full Professor of International Relations at the Department of Political Science at Troy University, USA. He is the author of numerous articles published in peer-reviewed journals. His publications include: 'The Complexities of Internal Conflict in the Third World: Beyond Ethnic and Religious Conflict' (2009); 'The Patterns of External Debt Profile in the Developing World' (2009); 'A Multidimensionality of Economic Globalization and its Controversial Effect' (2008); 'The Determinants of Internal Conflict in the Third World' (2006); 'An Analysis of the Gap Between Growth and Income Inequality in the Third World' (1998); 'Trade-Offs between Military Spending, Quality of Life and Economic Growth' (1996).

Peter G. KIRSCHSLAEGER, Ph.D., Lecturer, Co-Director of the Centre of Human Rights Education (ZMRB), University of Teacher Education Lucerne; Private Lecturer at the University of Fribourg; Member of the Board of the Swiss Centre of Expertise in Human Rights.

Endre KISS is Professor for history of philosophy at the University Eötvös (Budapest) and professor for German Literature, the founder of the Center for Postmodernism (Budapest-Székesfehérvár).

Andrey V. KOROTAYEV is Senior Research Professor of the Oriental Institute and Institute for African Studies, Russian Academy of Sciences, Head of the Laboratory for Destabilization Risk Monitoring of the National Research University Higher School of Economics, Senior Research Professor of the International Laboratory for Political Demography of the Russian Presidential Academy of National Economy and Public Administration, as well as a Professor at the Faculty of Global Studies of the Moscow State University. He is the author of over 300 scholarly publications, including such monographs as *Ancient Yemen* (1995), *World Religions and Social Evolution of the Old World Oikumene Civilizations: A Cross-Cultural Perspective* (2004), *Introduction to Social Macrodynamics: Compact Macromodels of the World System Growth* (2006), and *Introduction to Social Macrodynamics: Secular Cycles and Millennial Trends* (2006). At present, together with Askar Akaev and Sergey Malkov, he coordinates the Russian Academy of Sciences Presidium Project 'Complex System Analysis and Mathematical Modeling of Global Dynamics'. He is a laureate of the Russian Science Support Foundation in 'The Best Economists of the Russian Academy of Sciences' Nomination (2006).

Olga G. LEONOVA is Doctor of Political Science, Professor of Chair of Sociology and Political Science of Institute for Refresher and Advanced Professional Training, Moscow State University, Professor of the Faculty of Global Studies.

Patrick MANNING is Andrew W. Mellon Professor of World History at the University of Pittsburgh. He is director of the World History Center, located in the Department of History and affiliated with the Global Studies Program and the University Center of International Studies. Trained as a specialist in the economic history of Africa, he has become a specialist in world history. His research has focused on demographic history (African

slave trade), social and cultural history of francophone Africa, global migration, the African diaspora as a dimension of global history, and an overview of the field of world history. He was educated at the California Institute of Technology (BS in Chemistry, 1963) and the University of Wisconsin - Madison (MS in History and Economics, PhD in History 1969). He served as Vice President of the Teaching Division of the American Historical Association, 2004–2006. Before moving to the University of Pittsburgh in 2006, Manning was at Northeastern University for two decades. There he directed the World History Center, 1994–2004, and directed PhD students writing world historical dissertations. Manning now serves as President of the World History Network, Inc., a nonprofit corporation fostering research in world history. His current research centers on global social movements, 1989–1992, African population 1650–1950, and on an interdisciplinary history of early humanity in collaboration with Christopher Ehret.

Victor de MUNCK is an Associate Professor in the Anthropology Department of the State University of New York – New Paltz. His specialty is cognitive anthropology; he has published one monograph (*Culture, Self and Meaning*) on this subject and 15 articles on describing the dynamics between cognitive processes and culture, as well as a number of articles in cross-cultural research, including ‘Sexual Equality and Romantic Love: A Reanalysis of Rosenblatt’s Study on the Function of Romantic Love’ (1999, with Andrey Korotayev), ‘Galton’s Asset’ and ‘Flower’s Problem’: Cultural Networks and Cultural Units in Cross-Cultural Research (or, the Male Genital Mutilations and Polygyny in Cross-Cultural Perspective)’ (2003, with Andrey Korotayev) and ‘Valuing Thinness or Fatness in Women: Reevaluating the Effect of Resource Scarcity’ (2005, with Carol R. Ember, Melvin Ember, and Andrey Korotayev). Professor de Munck has conducted three years of fieldwork in Sri Lanka which has so far yielded one ethnography (*Seasonal Cycles*. Delhi: Asian Educational Services, 1993) and over forty articles. Most recently Dr. de Munck received grants from the National Science Foundation and the Fulbright Foundation grant. These have been used to conduct field work on romantic love, marriage choices and sexual practices in Russia, Lithuania and the U.S. This research has thus far yielded one edited volume and a number of articles on cultural models of romantic love.

Jason L. POWELL, Ph.D. works at Manchester Metropolitan University, UK. He is also visiting Research Fellow in Gerontology at the University of Oxford and Visiting Scholar at Harvard University. His research is on ageing, social care, community development, life-course, globalization, China, qualitative methodology, social justice and global dynamics. He has published over 400 refereed articles, book chapters, reports and has 40 books out or in press: *Aging in China* (2012); *The Global Dynamics of Aging* (2012); *Social Welfare, Aging and Social Theory* (2012). He is Series Editor of (i) *International Ageing*; and (ii) *International Social Policy* for Springer Publishers. He won ‘Highly Commended Article Award’ in The International Journal of Sociology & Social Policy. In the USA, *The Journal of Applied Gerontology* had a special edition on his work on Foucauldian approaches to ageing. He has been invited and served on over 110 editorial boards across the world, is Associate Editor of The Canadian Journal of Sociology, and is Editor-in-Chief of US-based international journal, *Illness, Crisis & Loss*. He has been Visiting Professor in US, Canada, South Africa, Jordan and Australia.

Bruno G. RUETTIMANN, Dr. Ing. MBA, studied electronics engineering at the Polytechnic Institute of Milan and business administration at the Bocconi University of Eco-

nomics, Milan/Italy. During 20 years he worked in the aluminium industry for Alusuisse and Alcan Inc. in various capacities, as Managing Director, Director of Strategic Planning as well as Responsible for Business Development, gaining deep insights into the logics of different industries. In parallel, he worked as well as internal Lean Six Sigma trainer, coach, and consultant to change the attitude of employees and to improve the competitiveness of Alcan's manufacturing plant. He is the author of several economy related articles and congress papers mainly linked to the aluminum industry. Today he advises institutions and companies; he is invited as a keynote speaker at international congresses with main focus on globalization and strategy. As a Master Black Belt he teaches Lean Six Sigma principles at Inspire/ETH Zurich for the Swiss Institute for Systems Engineering SISE.

Tuğçe VAROL SEVİM is an Istanbul based researcher and academic on the issues of Energy and Russian Foreign Policy. She completed her BA and Ph.D degree in Yeditepe University, Political Science and International Relations and MA in Kadir Has University, International Relations and Globalization. Since 2007, she writes academic articles, newsletters, participates in international conferences, and continues her position as Scientific Adviser in the 21st Century Institute of Energy and Energy Security and Assistant Professor in Istanbul Aydın University.

Fabien SCHANG, doctor in philosophy of logic, assistant professor at Moscow State University (Faculty of Global Studies), post-doctoral researcher.

Jim SHEFFIELD is Senior Lecturer at the University of Auckland's Business School in Information Systems and at University of Victoria at Wellington's Management School. Dr. Sheffield has a PhD in Business Administration (University of Arizona, USA), an MBA (University of Wisconsin, Madison, USA), MSc in Physics (University of Auckland), and a BSc in Mathematics and Physics (University of Auckland). His doctoral work at the University of Arizona in group support systems led to the creation of a Decision Support Centre at the University of Auckland. He has designed, implemented and evaluated more than 100 action research initiatives. Most of these initiatives centered on complex inter-organizational situations involving considerable confusion and conflict. Dr. Sheffield's major action research initiatives include the development of economic strategy, science policy, and comprehensive regional planning. His current research interests include: analytical frameworks for intervention design; ethical inquiry; group support systems; knowledge management; and research methods. In addition to Dr. Sheffield's body of professional and research work, his most recent publications include 'Pluralism in Knowledge Management: A Review', in press with the *International Journal of Knowledge Management*, and 'A Paradigmatic and Methodological Examination of Knowledge Management Research: 2000–2004' in *Decision Support Systems* (with Z. Guo).

Weiming TU is Director of the Institute for Advanced Humanistic Studies at Peking University, Peking University Chair Professor of Humanities, and Research Professor and Senior Fellow of Asia Center at Harvard University. He received his B.A. from Tunghai University in Taiwan, M.A. and Ph.D. from Harvard University. Tu is a fellow of the American Academy of Arts and Sciences (1988–present), executive member of the Federation of International Philosophical Societies (FISP, 2008 – present) and a tutelary member of the International Institute of Philosophy (IIP, 2010– present). He was invited by the United Nations as a member of the Group of Eminent Persons to facilitate the Dia-

logue among Civilizations in 2001 and gave a presentation on civilizational dialogue to the Executive Board of UNESCO in 2004. Tu has been instrumental in developing discourses on dialogue among civilizations, Cultural China, reflection on the Enlightenment mentality of the modern West, and multiple modernities. He is currently studying the modern transformation of Confucian humanism in East Asia and tapping its spiritual resources for human flourishing in the global community.

Arkady D. URSUL is the author and coauthor of more than 1,100 scientific publications and several hundred scientific and popular publications, including more than 160 monographs, books and brochures; he is an editor of more than 250 scientific collective works, many of them have been translated into dozens of languages. He is the Director of the Center for Global Processes and Sustainable Development of the Russian State Trade and Economic University, Prof. of the Faculty of Global Studies of the Moscow State University and the Chair of the Department of Global Studies and Geopolitics of the Siberian Federal University.

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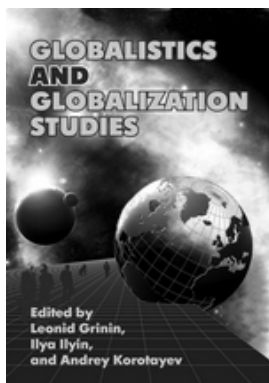
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GLOBALISTICS AND GLOBALIZATION STUDIES



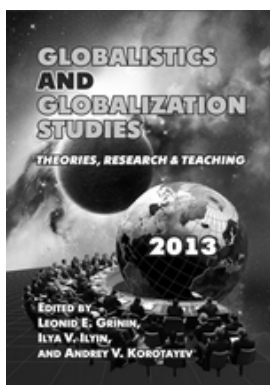
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Today globalization can be treated as the most important global process. It is a multi-faceted phenomenon and in every country it has its own image. One can get a truly objective picture of the rapidly changing and integrating world only through a synthesis of all those particular visions. In the present anthology one can find perceptions of globalization by a number of famous scholars from different countries of the world (Ervin Laszlo, Roland Robertson, Shmuel N. Eisenstadt, Randall Collins, Christopher Chase-Dunn, William Thompson and others), but one can also get to know rather peculiar visions of globalization by the Russian scientists.

The volume is entitled Globalistics and Globalization Studies. Globalistics may be regarded as a sort of systemic and more or less integrated 'core' within Global Studies. The anthology consists of four parts presenting a wide range of views on the meaning of the contemporary epoch, the past and the future of some important global processes. Part 1. Historical Dimension. Part 2. Globalistics, Global Studies and Models. Part 3. Trends, Risks, and Problems. Part 4. Perspectives and the New World Order.

GLOBALISTICS AND GLOBALIZATION STUDIES THEORIES, RESEARCH & TEACHING



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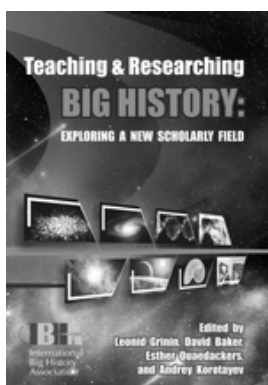
This is the second issue of the new series titled Globalistics and Globalization Studies. Globalistics may be regarded as a sort of systemic and more or less integrated 'core' within Global Studies. At present Global Studies function in two main dimensions – in the research of global political, economic, cultural and social processes, on the one hand, and in the realm of teaching – manifesting themselves in the creation of various Global Studies programs and courses for university students who learn to see the world in its entirety and variety. The second dimension is immensely important as the contents of such programs and courses may determine how the world will be comprehended by those people who may decide its fate in a decade or two. This dualistic nature of Global Studies has determined the general direction

of our anthology that comprises both the theoretical dimension of Global Studies and their application to the teaching process.

The anthology consists of three parts presenting a wide range of views on the meaning of the contemporary epoch, the past and the future of some important global processes as well as problems and successes in the teaching process of Global Studies. Part 1. Globalization in Historical Retrospective. Part 2. Globalistics, Global Studies, and Global Processes. Part 3. Teaching Global Studies.

In the present anthology one can find perceptions of globalization by a number of famous scholars from different countries of the world (Ervin Laszlo, Christopher Chase-Dunn, and others), but one can also get to know rather peculiar visions of globalization by Russian scientists and educators.

TEACHING & RESEARCHING BIG HISTORY: EXPLORING A NEW SCHOLARLY FIELD



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According to the working definition of the International Big History Association, 'Big History seeks to understand the integrated history of the Cosmos, Earth, Life and Humanity, using the best available empirical evidence and scholarly methods.' In recent years Big History has been developing very fast indeed. Big History courses are taught in the schools and universities of several dozen countries. Hundreds of researchers are involved in studying and teaching Big History. The unique approach of Big History, the interdisciplinary genre of history that deals with the grand narrative of 13.8 billion years, has opened up a vast amount of research agendas. Big History brings together constantly updated information from the scientific disciplines and merges it with the contemplative realms of philosophy and the humanities. It also provides a connection between the past, present, and future. Big History is a colossal and extremely heterogeneous field of research encompassing all the forms of existence and all timescales. Unsurprisingly, Big History may be presented in very different aspects and facets. In this volume the Big History is presented and discussed in three different ways. In its first part, Big History is explored in terms of methodology, theories of knowledge, as well as showcasing the personal approach of scholars to Big History. The second section comprises such articles that could clarify Big History's main trends and laws. The third part of this book explores the nature of teaching Big History as well as profiling a number of educational methods.

This volume will be useful both for those who study interdisciplinary macroproblems and for specialists working in focused directions, as well as for those who are interested in evolutionary issues of Astrophysics, Geology, Biology, History, Anthropology, Linguistics and other areas of study. More than that, this edition will challenge and excite your vision of your own life and the exciting new discoveries going on around us!